

# Montgomery County, 2025

# Montgomery County Comprehensive Plan Adopted: 12 October 2004

The *Montgomery County, 2025 Handbook* consists of the critical features map, the future land use map, and the goals, objectives, and strategies from the adopted comprehensive plan. It is provided as a reference and is not meant to take the place of the full comprehensive plan.

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# Land Use Policies

**PLU Goal 1.0 Balanced Growth:** The County will maintain a balance between urban and rural areas by planning for orderly growth to occur in areas with adequate resources and services to support growth.

PLU 1.1 Planning Policy Areas: Establish boundaries for distinct urban and rural planning policy areas and identify preferred development patterns for each planning area to (i) promote growth where it can be supported by infrastructure improvements; (ii) maintain existing community character; and (iii) preserve agriculture, forestry, and related uses where most appropriate based on natural resources and where existing development and land use patterns support the continuation of these uses.

**PLU 1.1.1 Policy Area Designations**: Develop a policy for the periodic consideration by the county of landowner requests to change policy area designations in the Comprehensive Plan.

PLU 1.2 Resource Stewardship Areas: Resource Stewardship Areas are generally defined as rural areas of the County that have high resource value based on soil types, or that are environmentally sensitive due to topography or unique land characteristics. These areas include national forest land, state lands, private preserves, undeveloped prime agricultural soils and soils of local importance, agricultural and forestal districts, land that is subject to private conservation easements and conservation zoning and areas of predominantly 25% slope or greater. This planning policy area is the least densely developed of all of the planning areas and includes many largely undeveloped areas of the County. (3)

### **Cross References and Notes:**

3. While resource stewardship is a theme which runs throughout this plan, specific references to the resource stewardship areas are also included in the Environmental Resource Chapter, including: ENV 1.0 Natural Environmental Resources (pg. 31); ENV 2.0 Open Space and Natural Resource (pg. 32); ENV 2.1.1-11 Approaches to Open Space and Agricultural Preservation (pg. 34); ENV 3.0 Streams, Rivers, and Surface Waters (pg. 36); ENV 3.2 Vegetation and Soil (pg. 36); ENV 4.0 Floodplains (pg. 38), ENV 6.0 Karst (pg. 42). References to Historic Preservation can be found in CRS 1.1 (pg. 22).

# PLU 1.2.1 Resource Stewardship Area Land Uses:

- a. The preferred land uses for Resource Stewardship Areas include agriculture, forest uses, outdoor recreational uses, other natural resource based uses and accessory uses directly related to the support of the preferred land uses.
- b. Low-density residential development will be permitted, but not encouraged, as a secondary use in Resource Stewardship Areas.
- c. Private and public conservation efforts and farmland retention programs, such as agricultural and forestal districts, should be focused in Resource Stewardship Areas. (4)
- d. Non-residential uses, except those incidental to and supportive of agriculture, forest, outdoor recreational or other preferred land uses, will be discouraged in Resource Stewardship Areas.
- e. Rezoning to allow higher intensity uses in Resource Stewardship Areas will be discouraged.
- f. The County may permit new non-agriculturally related institutional uses by special use permit provided the use is compatible in scale and intensity with agricultural and rural residential uses, poses no threat to public health, safety and welfare, and if the use helps preserve farmland, open space or historic, scenic or natural resources.

#### **Cross References and Notes:**

4. For approaches to conservation, see also ENV 2.0 Open Space and Natural Resources (pg. 32); ENV 2.1.1-11 Approaches to Open Space and Agricultural Preservation (pg. 34); and ENV 6.4 Conservation (pg. 42).

# PLU 1.2.2 Resource Stewardship Area Community Design:

- a. Development densities in Resource Stewardship Areas are based on a sliding scale approach and range from .05 to 1.0 dwelling units per acre. (5)
- b. New residential development proposed in Resource Stewardship Areas should be clustered, or exhibit other conservation design principles, to preserve on-site natural, cultural, historic, scenic, open space or environmental resources. (6)
- c. The County will vigorously support "Right to Farm" policies in Resource Stewardship Areas to protect existing farms and farmers from nuisance complaints from neighboring rural residents. Plats for new residential lots located in the Resource Stewardship Area shall disclose that the preferred land use in the immediate vicinity of the new lot is agriculture, forestry, and related uses. (7)

# PLU 1.2.3 Resource Stewardship Area Community Facilities and Utilities:

a. Future sewer and water service extensions to Resource Stewardship Areas will be discouraged except to resolve existing public health threats or to interconnect existing individual systems. (8)

### **Cross References and Notes:**

5. The sliding scale was included in the new zoning ordinance, adopted in 1999. Additional references to the sliding scale can be found in ENV 2.0 Open Space and Natural Resources (pg. 32) and ENV 2.1.4 Sliding Scale Zoning (pg. 34)

 Additional references to cluster development can be found in ENV 2.0 Open Space and Natural Resources (pg. 32) and ENV 2.1.5 Rural Cluster Zoning (pg. 34).

- 7. References to Agriculture can be found in ENV 1.2 Resource Management (pg. 31); ENV 2.5 Agriculture (pg. 33); ENV 2.1.3 Agricultural/Forestal Districts (pg. 34); ENV 2.1.7 Rural Development Initiatives (pg. 34); and ENV 2.1.8 Use Value Assessment (pg. 35).
- 8. Limits on the expansion of utilities into the resource stewardship areas are addressed in UTL 1.2.5 Growth Boundary (pg. 62).

- b. With the exception of public parks and outdoor recreation facilities, Resource Stewardship Areas will not be a preferred location for new community facilities.
- c. Transportation access and improvements in Resource Stewardship Areas will be limited to what is necessary to serve very low-density development. New rural residential subdivisions should be served by internal streets that connect to existing rural roads to avoid strip development and to minimize individual driveway access along existing public roads.
- d. The use of private roads will generally be discouraged in Resource Stewardship Areas.

**PLU 1.3 Rural Areas:** Rural Areas are generally defined as areas of the County, not generally served by public utilities, where agricultural and rural residential uses are predominant and should be preserved and stabilized. These areas include low-density rural residential subdivisions and active agriculture on secondary agricultural soils. Agricultural uses in these areas are often fragmented and subject to encroaching rural residential development.

# PLU 1.3.1 Rural Area Land Uses:

- a. The preferred land uses in Rural Areas are rural residential development and agriculture. Rather than promoting new rural residential development in Rural Areas, the County seeks to maintain the rural character of existing rural residential developments. The County also seeks to maintain existing agricultural uses in Rural Areas.
- b. The County will continue to promote farmland retention programs, such as agricultural and forestal districts, in Rural Areas. (9)
- c. New low-density rural residential development will be permitted, but not encouraged, in Rural Areas. Where such development does occur, the County will encourage compact or clustered development to preserve open space and natural resources. (10)
- d. Rezonings to allow higher intensity uses in Rural Areas will be discouraged. (11)
- e. New non-agriculturally based industrial and commercial uses will generally be discouraged in Rural Areas, unless the use is compatible in scale

# **Cross References and Notes:**

9. Farmland retention is also addressed in ENV 2.0: Open Space and Natural Resources (pg. 32); ENV 2.5: Agriculture (pg. 33); and ENV 2.1.3: Agricultural and Forestal Districts (pg. 34).

10. Rural residential cluster development is addressed in ENV 2.1.5: Rural Cluster Development (pg. 34).

11. Controlling rural density is addressed in ENV 2.1.9: Urban Growth Boundaries--Urban and Village Expansion (pg. 35).

- and intensity with agricultural and rural residential uses and poses no threat to public health, safety and welfare. (12)
- f. The County may permit new non-agriculturally related institutional uses by special exception provided the use is compatible in scale and intensity with agricultural and rural residential uses and poses no threat to public health, safety and welfare.

# PLU 1.3.2. Rural Area Community Design:

- a. New development in Rural Areas shall not exceed 0.75 dwelling unit per acre.
- b. New residential development proposed in Rural Areas should be clustered, or exhibit other conservation design principles, to preserve on-site natural, cultural, historic, scenic, open space or environmental resources. (13)

# PLU 1.3.3. Rural Area Community Facilities and Utilities:

a. Future sewer and water service extensions to Rural Areas will be discouraged except to resolve existing public health threats or to interconnect existing individual systems. (14)

# **Cross References and Notes:**

12. Development and growth of sustainable agriculture is addressed in ENV 2.1.7: Rural Development Initiatives (pg. 34).

13. The preservation of open space, agricultural lands, and the rural character are discussed in CRS 1.0 Historic Preservation (pg. 22); ENV 1.4: Wildlife Corridors (pg. 32); ENV 2.0 Open Space and Natural Resources (pg. 32); ENV 2.1: Private Open Space (pg. 32); ENV 2.3 Viewsheds (pg. 32); ENV 2.4 Forest Lands (pg. 33); ENV 2.5 Agriculture (pg. 33); ENV 2.1.5: Rural Cluster Zoning (pg. 34); ENV 3.1.3: Environmental Quality Corridors (pg. 36); ENV 3.2.6: Preservation of Natural Landscapes (pg. 37); ENV 3.2.7 Protection of Riparian Features (142); and ENV 5.4 Wellhead Protection (pg. 40).

14. Additional references on utilities in rural areas can be found in ENV 2.1.9 Urban Growth Boundaries--Urban and Village Expansion Areas (pg. 35), UTL 1.2.5 Growth Boundaries (pg. 62); and UTL 1.3 Private Systems (pg. 62).

- b. With the exception of public parks, recreation facilities, and solid waste collection facilities, Rural Areas will not be a preferred location for new community facilities
- c. Transportation access is via existing collector highways. New rural residential subdivisions should be served by internal streets that connect to existing rural roads to avoid strip development and to minimize individual driveway access along existing collector highways. (15)
- d. The use of private roads will generally be discouraged in Rural Areas.

#### **Cross References and Notes:**

15. Issues connected to subdivision road systems can be found in TRN 1.3 Subdivisions (pg. 55) and TRN 1.3.2 Street Continuation and Connectivity (pg. 55).

**PLU 1.4 Rural Communities:** Rural Communities are generally defined as scattered, small-scale, stable rural residential communities of local historic significance. These communities, often located at crossroads, have specific place names and have traditionally functioned as community focal points. Some of these communities include areas zoned to higher residential categories than the surrounding the rural community. Some of these communities also have limited public sewer and/or water service. The existing development pattern in these areas should be preserved. (16)

# PLU 1.4.1 Rural Communities Land Uses:

- a. The preferred land use in Rural Communities is residential infill in a traditional small lot pattern, consistent with existing residential development. (17)
- b. Small-scale, civic, institutional and employment uses may be permitted in rural communities in locations that enhance the compact nature of these communities, provided they do not pose a threat to public health, safety, or welfare, and provided they are compatible with adjacent land uses.
- c. Rezonings to allow higher intensity uses at the edge of Rural Communities will be discouraged. Rezonings may be considered for residential or non-residential infill development that enhances the community fabric by augmenting the core of the Rural Community, provided the proposed development is compatible with adjacent uses and can be supported by existing or improved roads and planned or existing utilities.

# **Cross References and Notes:**

16. Currently, Montgomery County has 18 rural communities: Alleghany Springs, Ironto, Denhill, Piedmont, Otey, Reesedale, Ellett, Lusters Gate, McCoy, Wake Forest, Longshop, Vicker, Walton, Graysontown, Childress, Rogers, Pilot, and Sugar Grove. Although some of these communities are primarily crossroads, most have had, at one time a commercial district, many have existing historical structures included in the Montgomery County Survey of Historical Sites, and all have been places people identify themselves as "being from." A few places already have access to limited public water or sewer, such as Alleghany Springs. However, most are not currently served by either.

17. Rural community development is addressed in ENV 2.1.5 Rural Cluster Zoning (pg. 34); PNG 4.0 Village and Rural Communities (pg. 20); and PNG 4.1.3 Planning for Rural Communities (pg. 21).

# PLU 1.4.2 Rural Communities Community Design:

- a. New residential development in Rural Communities should be predominately single family residential. Appropriate development densities in Rural Areas should be determined on a case by case basis, depending on existing zoning. In the case of a rezoning, the proposal must demonstrate that development densities will be of an intensity that is similar to or compatible with surrounding existing development.
- b. New development proposed in Rural Communities should be designed to relate to existing community elements and provide logical connections to existing streets, sidewalks and other features. Design elements should includes a generally interconnected street network, defined open spaces that serve as exterior rooms, multiple uses within a single building, multiple uses adjacent to one another, building fronts set close to the street, comfortable and safe pedestrian access between sites and along sidewalks, onstreet parking, and parking lots and garages located behind buildings.
- c. New structures should be of a scale and type that are consistent with existing structures.
- d. New residential development proposed in Rural Communities should exhibit conservation design principles, to preserve on-site natural, cultural, historic, scenic, open space or environmental resources.

# PLU 1.4.3 Rural Communities Community Facilities and Utilities:

 a. Future sewer and water service extensions to Rural Communities will be discouraged except to resolve existing public health threats or to interconnect existing individual systems. (18)

### **Cross References and Notes:**

18. Private and individual sewerage systems are addressed in UTL 1.3 Private Systems (pg. 62) and UTL1.4 Individual Systems (pg. 62).

- b. With the exception of public parks, recreation facilities, and solid waste collection facilities, Rural Communities will not be a preferred location for new community facilities. However, the County does encourage the maintenance, enhancement and where appropriate, the expansion of existing community facilities that serve a regional need. (19)
- c. Transportation access is via existing collector highways. New development in Rural Communities will be designed to access existing roads. Road improvements may be necessary to ensure safe ingress and egress. Street design must be compatible with the historic character of the local roads, in terms of pavement width, building setbacks, etc. (20)

<sup>19.</sup> The placement of park and recreational facilities are discussed in PRC 2.5 Plan Review (pg. 53).

<sup>20.</sup> See TRN 1.3.2 Street Continuation and Connectivity (pg. 55) for a discussion of transportation considerations in subdivisions and developments.

PLU 1.5. Residential Transition Areas: Residential Transition Areas are generally defined as stable, low density residential neighborhoods in close proximity to Municipalities and Urban Expansion or areas of higher density residential development outside of Villages, Village Expansion Areas, and Rural Communities, such as major subdivisions and mobile home parks. These areas include undeveloped land that has been previously zoned for residential development. There is limited public sewer and/or water service in some of these areas.

# PLU 1.5.1 Residential Transition Area Land Uses:

- a. The predominant and preferred land use in Residential Transition areas is residential. The type of residential developments depends upon the location of the residential transition area and may include singlefamily detached homes or manufactured home parks.
- b. The County anticipates residential development of infill properties in existing subdivisions and of undeveloped properties with existing residential zoning. Development on in-fill properties should be compatible with adjacent development in terms of scale and density and should provide a seamless transition from existing to new development. (20)
- c. The County should evaluate portions of the Residential Transition areas that have built out at development levels that are lower than what would be permitted by zoning to determine if there is any benefit to rezone these areas to be consistent with actual development.

# PLU 1.5.2 Residential Transition Area Community Design:

a. New development in Residential Transition Areas

#### **Cross References and Notes:**

21. As with rural communities, new development will be evaluated on a case-by-case basis. Manufactured Housing developments are addressed in HSG 1.2: Manufactured Housing and Housing Parks (pg. 49). Subdivision development is addressed in HSG 1.0 Livable Neighborhoods (pg. 48); HSG 1.3 Safe Neighborhoods (pg. 49); and TRN 1.3 Subdivisions (pg. 55).

- shall not exceed 1 dwelling unit per acre, with the exception of developments served by both public water and sewer.
- b. New development proposed in Residential Transition Areas should be clustered, or exhibit other conservation design principles to preserve on-site natural, cultural, historic, scenic, open space, or environmental resources. (22)
- c. New development in Residential Transition Areas should be designed to be compatible with existing neighborhoods and subdivisions.

# **PLU 1.5.3 Residential Transition Area Facilities** and Utilities: (23)

- a. Future sewer and water service extensions to Residential Transition Areas will be discouraged except to resolve existing public health threats or to interconnect existing individual systems or when provided by private developers
- b. With the exception of public parks, recreation facilities, and solid waste collection facilities, Residential Transition Areas will not be a preferred location for new community facilities. However, the County does encourage the maintenance, enhancement and where appropriate, the expansion of existing community facilities that serve a regional need.

<sup>22.</sup> The preservation of open space, agricultural lands, and the rural character are discussed in CRS 1.0 Historic Preservation (pg. 22); ENV 2.0 Open Space and Natural Resources (pg. 32); ENV 3.1.3: Environmental Quality Corridors (pg. 36); ENV 3.2.6: Preservation of Natural Landscapes (pg. 37); and ENV 3.2.7 Protection of Riparian Features (pg. 37).

<sup>23.</sup> Information on the location public facilities are included in PRC 2.5 Planning Review (pg. 53), SFY 1.4 New Development (pg. 51), and UTL 1.2 Public Systems (pg. 61); and UTL 3.2.1 Consolidated Collection Sites (pg. 64).

c. Transportation improvements in these areas will generally be limited to routine maintenance and enhancements needed to improve public safety. Countywide or regional transportation improvements that may affect Residential Transition Areas should be designed to minimize and/or mitigate potential negative impacts on these areas. **PLU 1.6 Village Expansion Areas:** These are "areas of interest" associated with the designated Villages. These are natural expansion areas for the Villages that may potentially be served by future public sewer and water extensions. Preliminary boundaries should be set based on utility service areas, physical and natural features that define the "area of interest" and existing zoning. Local community planning efforts should determine final boundaries.

# PLU 1.6.1 Village Expansion Areas Planning Process.

The County will develop a planning process to work jointly with residents of each village and surrounding area to define a specific village expansion boundary and to prepare a village plan to guide future development. Upon completion, each village plan should be adopted as an amendment to the countywide Comprehensive Plan. (24)

PLU 1.6.2 Village and Village Expansion Zoning Amendments. Review and revise the Zoning Ordinance to create mixed use, "traditional neighborhood design" development options that will facilitate compact traditional design of new projects in Villages and Village Expansion areas. (25)

# PLU 1.6.3 Village Expansion Area Land Use:

a. Village Expansion Areas are intended to provide an alternative to scattered rural residential development and to provide an opportunity to enhance the vitality of existing villages by providing for compatible expansions of residential and employment uses. Village expansion areas are adjacent to existing

<sup>24.</sup> Village Planning is addressed in PNG 4.0: Villages and Rural Communities (pg. 20); PNG 4.1.1: Livable Communities (pg. 20); PNG 4.1.2 Planning for Villages (pg. 21); and PNG 4.2: Public Facilities (pg. 21).

<sup>25.</sup> Mixed use and traditional neighborhood design (TND) options are addressed in PLU 3.0 Community Design (pg. 16); PNG 4.1.1 Livable Communities (pg. 20); HHS 1.0 Livable Communities (pg. 45); HSG 1.0 Livable Neighborhoods (pg. 48); and HSG 1.3 HSG Safe Neighborhoods (pg. 49).

- villages where appropriate new development can be accommodated while retaining the viability and character of the historic village core.
- b. A mix of appropriately scaled residential, non-residential and community uses are anticipated in Village Expansion Areas.
- c. Specific land use recommendations will be developed as Village Plans and Village Expansion Area plans are developed and adopted.

# PLU 1.6.4 Village Expansion Area Community Design:

- a. From an area wide or large-scale project perspective, gross densities in Village Expansion Areas may range up to 2.0 dwelling units per acre.
- b. Compact development and a range of housing types are encouraged in Village Expansion Areas as long as new development is sensitive to existing village character and design. (26)
- c. Development in Village Expansion Areas should be designed to complement and augment the historic character and development pattern of the adjacent existing village by becoming a natural "extension" of the existing village. New development in the expansion areas should relate closely to the existing village and should be an "organic" continuation of the historic fabric of the village. Design element should include a generally interconnected street network, define open spaces that serve as "exterior rooms," multiple uses within a single building, multiple uses adjacent to one another, building fronts set close to the street, comfortable and safe pedestrian access between sites and along sidewalks, on-street

### **Cross References and Notes:**

26. Compact development and Traditional Neighborhood Designs are addressed in PLU 3.0: Community Design (pg. 16); PNG 4.1.1 Livable Communities (pg. 20); HHS 2.1: Affordable Housing (pg. 45); HSG 1.1: Affordable Housing (pg. 48).

- parking, and parking lots and garages located behind buildings.
- d. Development in Village Expansion Areas should be designed to preserve critical historic resources. (27)
- e. Development in Village Expansion Areas should be designed to preserve critical natural, open space, scenic landscape resources. (28)
- f. Street design must be compatible with the historic character of the local roads, in terms of pavement width, building setbacks, etc.

# PLU 1.6.5 Village Expansion Area Facilities and Utilities:

- a. Extensions of sewer and water lines from existing villages into Village Expansion Areas will be permitted in accordance with the adopted Comprehensive Plan Amendment for each village. (29)
- b. Village Expansion Areas are a preferred location for public investments in community facilities. (30)

# **Cross References and Notes:**

27. Historic preservation is addressed in CRS 1.1: Historic Villages, Districts, and Corridors (pg. 22).

28. Environmental and open space preservation is addressed, more specifically, in ENV 2.0: Open Space and Natural Resources (pg. 32); ENV 2.2 Public Open Space (pg. 32); ENV 3.1.3 Environmental Quality Corridors (pg. 36); ENV 3.2.6 Preservation of Natural Landscapes (pg. 37); ENV 3.2.7: Protection of Riparian Features (pg. 37); and ENV 4.2: Floodplain Programs and Policies (pg. 38).

29. Growth boundaries are addressed in ENV 2.1.9: Urban Growth Boundaries-Urban and Village Expansion Areas (pg. 35); and UTL 1.2.5: Growth Boundaries (pg. 62).

30. The location of public and community facilities is addressed in PNG 3.1.4 Community-Based Schools and Public Facilities (pg. 20); PNG 4.0: Villages and Small Communities (pg. 20); CRS 2.1.4 Library-Based Community Space (pg. 23); CRS 3.1: Cultural Facilities, Programs, and Events (pg. 24); EDU 1.2.1: Local and Neighborhood Facilities (pg. 29); HHS 2.5 Community Facilities (pg. 45); PRC 2.5: Planning Review (pg. 53); SFY 1.3 Future Capital Facilities (pg. 50); and UTL 3.2.1 Consolidated Collection Sites (pg. 64).

c. Roads serving new development in Village
Expansion Areas should be designed to tie into and
enhance the existing street network serving the
adjacent village. New roads and road improvements
and should be designed to accommodate pedestrians
as well as motor vehicles, rather than allowing
motor vehicles to cause and unsafe and unpleasant
pedestrian environment. (31)

**PLU 1.7. Villages:** These are larger rural communities where limited mixed-use development activity has historically occurred and public utilities are available. They are separate and distinct from each other and from nearby towns. Villages usually have a higher density, identifiable core that includes a mix of residential, business, industrial, and institutional use in a traditional development pattern. Villages have served as, and will continue to serve as, focal points for surrounding rural areas. (32) These include: Belview, Elliston-Lafayette, Plum Creek, Prices Fork, Riner and Shawsville. (33)

**PLU 1.7.1 Village Planning Process.** The County will develop a planning process to work jointly with residents of each village and the surrounding area to define a specific village expansion boundary and to prepare a village plan to guide future development. Upon completion, each village plan should be adopted as an amendment to the countywide Comprehensive Plan. (34)

### **Cross References and Notes:**

32. Maintaining current community assets (schools, fire and rescue stations, parks, and collections facilities) and developing new community assets helps maintain both the sense of community within the Villages and strengthens the Villages' role as a focal point for surrounding communities. The importance of community assets is also addressed in PLU 3.0: Community Design (pg. 16); PNG 3.1.1 Multi-use of Facilities (pg. 19); PNG 3.1.4 Community-Based Schools and Public Facilities (pg. 20); PNG 4.0 Villages and Rural Communities (pg. 20); PNG 4.2: Public Facilities (pg. 21); EDU 1.2.1 Local and Neighborhood Facilities (pg. 29); HHS 1.0 Livable Communities (pg. 45); HHS 4.2 Emergency Care Facilities (pg. 46); HHS 4.3 Emergency Response Facilities and Staff (pg. 46); HHS 5.0 Human Services and Facilities (pg. 170); PRC 2.1.4 Village Plans (pg. 53); SFY 1.3 Future Capital Facilities (pg. 50); TRN 3.3 Villages and Transportation Needs (pg. 59); and UTL 2.3: Broadband/Fiber-optic Networks (pg. 63).

33. In the focused growth approach, Villages and Village Expansion Areas (PLU 1.6), Urban Expansion Areas (PLU 1.7), and Municipalities (Blacksburg and Christiansburg) represent the primary targeted areas for future development. It should be noted, however, that not all types of growth and development are appropriate for all focused growth areas and projects will continue to be evaluated on a case by case basis in accord with the stated land use policies and subsequent village plans.

34. The Village planning process is also addressed in PNG 4.0: Villages and Rural Communities (pg. 20).

### **Cross References and Notes:**

31. Transportation is addressed in TRN 1.3 Subdivisions (pg. 55) and TRN 1.4 Connectivity and Access Management (pg. 55).

PLU 1.7.2 Village and Village Expansion Zoning Amendments. The County should review and revise the Zoning Ordinance to create mixed use, "traditional neighborhood" development options (35) that will facilitate compact traditional design of new projects in Villages and Village Expansion areas.

# PLU 1.7.3 Village Area Land Use:

- a. Villages should be predominately residential but may include a "downtown" area of business, commercial and institutional uses at densities higher than found in surrounding rural areas. New smallscale business, commercial, and employment uses may be appropriate in villages provided they are small-scale buildings with a pedestrian oriented street front.
- b. New small-scale industrial and employment uses may be appropriate in villages provided they are located adjacent to similar uses and are designed to minimize any negative impact on the existing village through limitations in scale, height, bulk and operations, as well as provision of buffers. (36)
- c. Specific land use recommendations will be developed as Village /Village Expansion Area Plans are developed and adopted. (37)

# PLU 1.7.4 Village Area Community Design:

a. The viability and historic character of existing villages shall be maintained by encouraging

#### **Cross References and Notes:**

35. Additional information and guidelines for community design and traditional neighborhood designs (TND) are addressed in PLU 3.0: Community Design (pg. 16).

36.Small business development is addressed in CRS 1.3: Historic Preservation and Tourism (pg. 23); ECD 4.1.1 Entrepreneurial Economy (pg. 28); and ENV 2.1.7 Rural Development Initiatives (pg. 34).

37. Village planning is also addressed in PNG 4.0. Villages and Rural Communities (pg. 20).

- preservation of historic structures and preservation of the historic pattern of developed and undeveloped areas that define the village and its boundaries. (38)
- b. New infill development may be appropriate provided it maintains the compact traditional design of patterns of existing villages and provided development densities are generally consistent with adjacent properties.
- c. A mix of housing types may be appropriate in villages provided new development is compatible in scale and character with existing structures. Alternative housing types such as "granny flats" and live-work units shall be encouraged in villages to expand the range of housing options available to County residents. (39)
- d. New development in the Village Areas shall conform to future Village Plans that will be adopted as part of the County's Comprehensive Plan. Until such specific plans are adopted, all new development within the village shall related closely to the existing, historic fabric of the village. Design elements should include a generally interconnected street network, defined opens spaces that serve as "exterior rooms", multiple uses within a single building, multiple uses adjacent to one another, building fronts set close to the street, comfortable and safe pedestrian access between sites and along sidewalks, on-street parking, and parking lots and garages located behind buildings.
- e. Street design must be compatible with the historic character of the local roads, in terms of pavement width, building setbacks, etc. (40)

# **Cross References and Notes:**

38. Historic Preservation is also addressed in CRS 1.1: Historic Villages, Districts, and Corridors (pg. 22) and CRS 1.1.3: Villages and Rural Communities (pg. 22). 39. Compact design and other forms of traditional neighborhood design are addressed in PLU 3.0 Community Design (pg. 16).

40. Context-sensitive street designs and standards is addressed in TRN1.3.4 (pg. 55).

# PLU 1.7.5 Village Area Facilities and Utilities:

- a. Villages are served by public sewer and water facilities. The extension of utilities to surrounding areas may be permitted in accordance with individual Village and Village Expansion Plans. (41)
- b. Villages are a preferred location for new community facilities and public investments. Additionally, the County supports the maintenance, enhancement and where appropriate, the expansion of existing community facilities located in villages. (42)
- c. Transportation access to Villages is usually via existing major collector or minor arterial highways, with a network of smaller streets serving the village center. New development in or adjacent to Villages must connect to and reinforce the traditional village road network. (43)
- d. New roads and road improvements within a Village Areas should be designed to accommodate pedestrians as well as motor vehicles, rather than allowing motor vehicles to cause an unsafe and unpleasant pedestrian environment. (44)
- e. Stormwater management plans for new development should consider the impact of the development's storm water on the Village and Village Expansion Area as a whole and provide adequate storm water management facilities which work with the Village's overall stormwater management plan and requirements. (45)

### **Cross References and Notes:**

41. The provision of utilities is also discussed in UTL 1.0 Water and Sewer (pg. 61).

42. See footnote 30 (pg. 8) for specific community facility references.

413. Street design standards are discussed in PLU 3.1.1(b) (pg. 16). See, also, TRN 1.3.4: Context-Sensitive Street Design (pg. 55).

44. Street design standards are discussed in PLU 3.1.1(b) (pg. 16). See HSG 1.3: Safe Neighborhoods (pg. 49); TRN 1.3.4: Context-Sensitive Street Design (pg. 55); and TRN 1.3.5 Pedestrian Transportation Facilities (pg. 55).

45. Stormwater Management is addressed in ENV 6.5: Stormwater Management (pg. 42); ENV 7.0 Stormwater and Erosion Control (pg. 43); and UTL 4.0 Stormwater Management (pg. 64).

**PLU 1.8 Urban Expansion Areas**: These are areas adjacent to the Town of Blacksburg, the Town of Christiansburg and the City of Radford that are planned for a broad range and mix of uses at urban development densities and intensities. Urban Expansion areas are served by or planned for central sewer and water service and will serve as natural expansion areas for uses occurring within town and city boundaries.

PLU 1.8.1 Industrial and Business Location Study: The County Planning Department should work with the Department of Economic Development to identify locations for new industrial and businesses parks and/or the expansion of existing parks in Urban Expansion Areas. (46)

**PLU 1.8.2 Corridor Planning:** The County should identify major transportation corridors within Urban Expansion Areas that posses unique potential for residential and non-residential development and initiate a corridor planning process to develop detailed land use policies and design guidelines to guide development in these key corridors. (47)

# PLU 1.8.3 Urban Expansion Area Land Use:

a. Urban Expansion Areas are the preferred location for new residential and non-residential development occurring in unincorporated areas of Montgomery County.

# **Cross References and Notes:**

46. Economic development siting and facility requirements are addressed in ECD 1.3 Future Land Use Requirements (pg. 25); ECD 3.0: Location and Land Use (pg. 27).

47. The majority of major corridors, in Montgomery County pass through Villages and/or other jurisdictions: 1) US 460/Rt 11 passes through the Villages of Elliston/Lafayette and Shawsville before entering the eastern end of Christiansburg; 2) US 460. passes through Christiansburg, Blacksburg, and Montgomery County; 3) Rt. 114 passes through Belview; 4) Rt. 11 passes through Plum Creek; and Rt.8 passes through Riner. Corridor plans are meant to address development along the stretches of road between the two towns and villages and to work, in tandem, with the comprehensive plans of the two towns and the Village Plans. They are not meant to supersede existing town or village plans.

- b. Urban Expansions Areas will accommodate a full range of residential unit types and densities.
- c. Major employment and commercial uses should be located in Urban Expansion Areas, in proximity to major transportation corridors. The County's major industrial parks located in Urban Expansion Areas should be expanded. (48)

# PLU 1.8.4 Urban Expansion Area Community Design: (49)

- a. From an area wide or large-scale project perspective, gross densities in Urban Expansion Areas may range up to 2.5 dwelling units per acre.
- b. The County will encourage high quality residential and non-residential design in Urban Expansion Areas. The County shall evaluate development proposals in Urban Expansion Areas to ensure that proposed development is compatible with existing communities and uses and is designed to minimize any negative impact on these existing neighborhoods. Such new development should be designed to provide a "seamless" transition from the existing development to the new.
- c. The County will encourage development of planned, mixed use, pedestrian and transit friendly communities in Urban Expansion Areas that would combine office, commercial, residential, recreational uses into a single development, with strong connections between all sites and all uses, especially pedestrian access along the public street network.

# **Cross References and Notes:**

48. Economic development siting and land use requirements are addressed in ECD 3.0: Location and Land Use (pg. 27).

49. Additional policies governing new development are addressed in PLU 2.0: New Development (pg. .48); and guidelines for community design are addressed in PLU 3.0: Community Design (pg. 16). See, also, footnote #46 (pg. 11).

- d. The County will encourage the use of development options (cluster, compact, mixed-use, etc.) that make better use of the land concentrating development away from on-site scenic, natural, historic or open space resources. In particular, the County will encourage residential development designs that provide neighborhood scale open space. Such open space elements should not be "left over" areas, but rather should be key, central focal points of the neighborhood, designed as true community spaces that are well defined by the street network and adjacent buildings.
- e. Development in Urban Expansion Areas will be compatible with and complimentary to development within corporate limits.

# PLU 1.8.5 Urban Expansion Area Facilities and Utilities:

- a. Urban Expansion Areas are or will be served by public sewer and water service provided by the County or by the towns and the City, by mutual agreement.
- b. Urban Expansion Areas will be the primary focus for public facility investments occurring outside the towns, the City, or the Villages. Urban Expansion Areas will be the preferred location for new community facilities that cannot be located in towns, the City, or the Villages. (50)
- c. Transportation improvements within the Urban Expansion Area will be designed to tie into the existing street network serving the City and the towns. (51)

### **Cross References and Notes:**

50. Public facilities include parks and other recreational facilities (PRC2.0, pg. 207); schools (EDU 1.1, pg. 116); solid waste collection facilities (UTL 3.0 pg. 237); health and human service facilities (HHS 4.0, pg. 176, and HHS 5.0, pg 147); fire, rescue, and law enforcement facilities (SFY 1.3, pg. 197); public water and sewer facilities (UTL 1.2, pg 234), and other facilities related to the provision of utilities (UTL 2.0, pg 236).

51. See, also, TRN 1.3.2 Street Continuation and Connectivity (pg. 55).

# PLU 1.8.6 Municipal Coordination/Cooperation.

The County will work with the municipalities (Blacksburg, Christiansburg, Radford) to identify areas of existing development that are accessed by municipal roads, served by municipal utilities and that can best be served by municipal services (law enforcement, trash collection, etc.). Additionally, the County and the municipalities will identify undeveloped areas within the Urban Expansion Area that are likely to have similar characteristics once they are developed. The County will promote the orderly inclusion of such areas into the municipalities through utility agreements and mutually acceptable boundary line adjustments. In turn, the municipalities will use cash proffers or other revenue sharing agreements to insure that new development in such areas pays its "fair share" of the cost of providing county facilities and services associated with new growth. Presently the County cooperates with each municipality in the review of proposed developments located close to municipal boundaries. The County will work with the municipalities to coordinate comprehensive planning for areas located close to municipal boundaries. (52)

**1.9 Focused Growth Targets**: In order to maintain a balance between urban and rural areas, the County targets 80% or more of future development within the unincorporated areas to occur within the Expansion Areas, Villages, Village Expansion Areas, and the Residential Transition Areas. Conversely, the County targets 20% or less of future development within the unincorporated areas to occur within the Rural Communities, Rural Areas, and the Resource Stewardship Area.

<sup>52.</sup> Opportunities for cooperation between Montgomery County, Blacksburg, Christiansburg, and the City of Radford are built into many of the subject specific chapters, including: PNG 1.0 Local and Regional Cooperation (pg. 18); CRS 1.1 Historic Villages, Districts, and Corridors (pg. 22); ECD 1.1 Montgomery County Regional Indicators Program (pg. 25); ECD 2.1.1 Community Technical Education/ Knowledge Capital Task Force (pg. 100); ECD 3.3 Downtown Revitalization (pg. 27); ENV3.5: Government Cooperation (pg. 38); ENV 4.1 Floodplains: Partnership and Regional Cooperation (pg. 38); ENV 7.0 Stormwater and Erosion Control (pg. 43); HHS 3.0 Regional Cooperation and Collaboration (pg. 46); HSG 1.1 Affordable Housing (pg. 48); PRC 1.0 Regional Cooperation and Collaboration (pg. 52); SFY 1.5 Regional Opportunities (pg. 51); TRN 1.2 Metropolitan Planning Organization (pg. 54); TRN 3.0 Mass Transit (pg. 58); TRN 4.0 Alternative Transportation (pg. 59); UTL 1.1 Water and Sewer: Regional Cooperation (pg. 61); UTL 2.2: Telecommunications Towers (pg. 63); UTL 2.3: Broadband/Fiber-optic Networks (pg. 63); UTL 3.1.1 Solid Waste Management: Regional Cooperation (pg. 64); and UTL 4.0: Stormwater Management (pg. 64).

**PLU 2.0 New Development:** The County will promote sound fiscal planning and good design principles by applying consistent standards to evaluate the design and impact of proposed development.

# PLU 2.1 Criteria for Evaluating Rezoning Applications: All residential rezoning requests will be evaluated using the following minimum criteria:

- a. *Location*. The property must be located within a Village, Village Expansion Area or Urban Expansion Area, with the exception of Rural Residential zoning.
- b. *Public Utilities*. The applicant must demonstrate that the proposed development will be served by public sewer (preferably both public water and public sewer), and that such service is either currently available or is planned and approved by the County and scheduled for construction to the site within a defined time period consistent with the other provisions of the Comprehensive Plan; with any necessary extensions to be funded by the applicant.
- c. Road Access. The property must have adequate and safe road access, with any necessary improvements provided by the applicant. Entrances onto existing public roads must be adequately spaced to provide safe access and maintain adequate capacity of the existing roadway. The applicant must dedicate any right-of-way necessary for future widening of such existing road.
- d. *Public Facilities and Amenities*. The applicant must provide a concept development plan of the entire property, showing future land uses, roads, walkways and trails, open spaces, public facility sites and the like.
- e. *Interparcel Access*. The concept plan must show one or more street connections to all adjoining properties that are not blocked by natural barriers. The applicant must construct these connections at the time such portion of the concept plan is developed. Interparcel access will not be required if the adjacent property is located in a Rural Area or a Rural Stewardship/Conservation area unless such a connection is identified on a Countywide or regional transportation plan.
- f. Pedestrian Access. The rezoning proposal must include

- provisions for pedestrian mobility within the site and safe and convenient connections for pedestrian traffic to adjacent sites and adjacent public roadways and trails.
- g. *Buffers*. Landscaped buffers must be provided at all edges of the site that abut existing or planned uses of lower intensities.
- **PLU 2.2. Proffer Guidelines:** The County will work with the development community to develop a framework for proffer guidelines to be used in the evaluation of rezoning applications.
  - **PLU 2.2.1 Proffer Guideline Principles:** The County will consider the following principles in evaluating and developing capital facility proffer guidelines to be used in conjunction with conditional zoning (rezoning) applications:
  - a. Percentage of Capital Costs: Proffers for public facilities and amenities will be encouraged for each residential rezoning, and are expected to have a total value that is sufficient to represent a significant "down payment" on the cost of the various capital facilities that will be constructed to serve the new residents.
  - b. Calculation of Capital Costs: At the County's discretion, residential capital facility costs may be estimated on the basis of capital costs for the average unit overall, or on the basis of costs per unit type, differentiating between detached, attached, manufactured ("mobile") and multi-family units. School costs may also be estimated separately.
  - c. *Direct Public Benefit*: To qualify as a capital facility proffer the land, facility or fund must be dedicated or deeded to the County or to another regional, state or federal agency which will ensure that it is used for the benefit of County citizens at large and must have a measurable value that can be quantified.
  - d. *Capital Facilities Proffer Principles:* To ensure that the proffer process is reasonable, effective and manageable, any proffer guidelines development by

the County should be based on the following principles:

- Consistency of content. Proffers should be negotiated and accepted on a consistent basis from one project to another. Uniform standards for capital facilities, based upon the Comprehensive Plan and CIP should be followed in determining appropriate proffers for a particular project.
- ii. *Consistency of format.* The County should develop a consistent format for proffer statements with consistent style and terminology so that proffers are comparable.
- iii. *Rational Nexus*. All proffers should have a direct and rational relationship to needs created by the project itself. To the maximum extent feasible, proffers should be built or otherwise allocated so as to directly benefit the particular project.
- iv. *Coordination*. Proffers from neighboring or adjacent developments should be coordinated to the maximum extent possible in order to ensure compatibility and consistency, and to avoid redundancy and conflict.
- e. *Transportation Proffers:* Proffers for roads and road improvements are considered a separate item, not included within the guideline due to the States responsibility for public roads. Road proffers should be based upon the specific needs of the site and its surrounding road network.
- f. *Types of Capital Facilities Proffers*: The County's proffer guidelines should be comprehensive and may include the following types of proffers as appropriate and as permitted by State law:

i.Dedication of land for public facilities;

- ii. Cash contributions for capital facilities; and
- iii.Construction of public facilities.
- g. *Other Types of Proffers*: The County proffer guidelines should also allow for a variety of other types of proffers that will enhance the quality of development in the County including:
  - i. Reservation of sites for private, non-profit community facilities;
  - ii. Phasing of development
  - iii. Impact mitigation;
  - iv. Preservation of special environmental, natural, open space or historic features; and
  - v. Special design criteria and features.

**PLU 2.3 Critical Features:** All development requests will be evaluated with respect to their impact on the critical, sensitive, special, and historical resources delineated on the Critical Features Map.

PLU 2.4 2232 Review Policy: Develop a policy for the review by the county, in accordance with Section 15.2-2232 of the Code of Virginia, of proposed new community facilities and expansion of existing community facilities. Such construction and expansions require careful consideration by local decision makers to assure that the needs and interests of the community are fulfilled in the most appropriate manner. The policy should include (1) a definition of public facility, (2) a list of what types of facilities are exempt from 2232 review, (3) application requirements for agencies and individuals submitting projects/proposals subject to 2232 applications, and (4) an outline of how the County will process 2232 applications, including how administrative determinations will be made regarding features shown.

- **PLU Goal 3.0 Community Design:** To maintain and enhance quality of life, the County will promote design principles for new development that are based on the traditional development patterns that created many treasured communities in Montgomery County.
  - **PLU 3.1 Traditional Neighborhood Design:** The County will develop traditional residential development options to be included in the County's Zoning Ordinance.
    - PLU 3.1.1 Traditional Neighborhood Design Zoning Ordinance Amendments: The County will develop zoning districts based on the following key principles of Traditional Neighborhood Developments:
    - a. Organization and Structure:
      - i. The organizing framework of a TND is an area of land that constitutes a five minute walk, or a circle of about one-quarter mile radius (about 150 acres). Commercial and higher density residential uses should be focused within such a core area.
      - ii. The neighborhood has a discernible center, often a square or a green, a busy or memorable street corner, and/or a prominent civic building (a transit stop can be located at this center). The center may be surrounded by a mixed-use retail/office core area.
      - iii. Most of the dwellings are within a five-minute walk of the neighborhood center, an average of roughly 1,500 feet, producing a total area of approximately 150 acres.
      - iv.Small playgrounds or "pocket parks" are located within 500 feet of every dwelling.
      - v. To the extent possible, an elementary school is close enough so that most children can walk from their home.

vi. Development is located in environmentally suitable areas, designed to preserve important environmental and cultural resources reinforced through a system of parks and public and institutional uses and, a formal neighborhood governance association to decide and/or advise on matters of maintenance, security and physical change (taxation remains the responsibility of the County).

# b. Streets

- i. The neighborhood is served by many transportation modes, including motor vehicle, pedestrian, bicycle and transit; motor vehicles and parking lots do not dominate.
- ii. The neighborhood's streets form a connected network, providing a variety of pedestrian and vehicular routes to any destination, which disperses traffic. (The streets are laid out generally in a "grid" pattern, forming blocks of about 1,200 feet in perimeter length each). Culde-sacs should be avoided; small "eyebrows" (short road loops with just a few houses) protruding from the main street should be used instead.
- iii. The circulation network includes streets, alleys, sidewalks and paths.
- iv. The streets are relatively narrow and shaded by rows of trees, often with on-street parking, which slows traffic, creating an environment suitable for pedestrians and bicycles.
- v. Buildings in the neighborhood center are placed close to the street, creating a feeling of "human scale" and a strong sense of place.
- vi.Parking lots and garage doors rarely front the street; parking is at the rear of buildings, usually

accessed by alleyways.

vii.Certain prominent sites at the termination of street vistas or in the neighborhood center are reserved for civic buildings that provide sites for community meetings, education, religious or cultural activities.

# c. Land Uses

 The neighborhood has a mix of uses so that residents have opportunities to live, recreate, learn, worship, and even work and shop in their neighborhood

- ii. There is a variety of dwelling types, densities and costs - single family houses, townhouses, apartments and accessory units -- for all kinds of people, including younger, older, singles, families, lower income, upper income, etc.
- iii. There are a variety of shops and offices at the core or the edge of the neighborhood to supply the weekly needs of a household.
- iv.A small ancillary building is permitted within the backyard of each house, which may be used as a rental unit, an "in-law" suite, or place to work (e.g. office or craft workshop).

# Government and Planning: Goals

PNG 1.0 Local and Regional Cooperation: Think regionally in order to better provide public goods and services more efficiently and effectively. In many cases this will involve the County working cooperatively with the two towns of Blacksburg and Christiansburg and possibly Virginia Tech. In other cases this will involve the County working cooperatively on a regional basis with other New River Valley governments (Radford, Floyd County, Giles County and/or Pulaski County) and possibly local governments in the Roanoke Valley. (1)

### **Cross References and Notes**

: 1. Local and regional cooperation are built into the full extent of this plan. Significant sections addressing local and regional cooperation are included the following: PLU 1.8.6 Municipal Coordination & Cooperation (pg. 13) CRS 1.0 Historic Preservation (pg. 22); CRS 3.0 Cultural Facilities and Fine Arts (pg. 24); ECD 2.0 Workforce Development (pg. 100); ECD 3.0 Location and Land Use (pg. 27); EDU 2.0 Livelong Learning Goal (pg. 30); ENV 3.0 Streams, Rivers, and Surface Waters (pg. 36); ENV 4.0 Floodplains (pg. 38); HHS 3.0 Regional Cooperation and Collaboration (pg. 46); HSG 1.1 Affordable Housing (pg. 48); PRC 1.0 Regional Cooperation and Collaboration (pg. 52); SFY 1.5 Regional Opportunities (pg. 51); TRN 1.2 Metropolitan Planning Organization (pg. 54); TRN 2.0 Highway System (pg. 56); TRN 3.0 Mass Transit (pg. 58), TRN 4.0 Alternative Transportation (pg. 59); UTL 1.1 Regional Cooperation (pg. 61), UTL 2.2 Telecommunications Towers (pg. 63); UTL 3.0 Solid Waste Management (pg. 64); UTL 4.0 Stormwater Management (pg. 64); and UTL 4.2 Regional Hazard Mitigation Plan (pg. 64)

**PNG 2.0 Citizen Participation:** Increase citizen participation in local government and provide more opportunities for public service. (2)

**PNG 2.1 Involving the Public:** Promote more active citizen involvement in the local government process through the use of innovative approaches and increased education and outreach. (3)

**PNG 2.1.1 Citizen Review:** Use Citizen Advisory Committees (CACs) to study and evaluate issues and advise local government decision makers.

**PNG 2.1.2 Neighborhood Networks:** Use of neighborhood networks as a tool for providing neighborhoods review and input on planning projects, public input into county issues, and requests to both the Planning Commission and the Board of Supervisors.

**PNG 2.1.3 Community Facilitators Program.** Use the Community Facilitators' Program, established under the comprehensive planning process to provide citizens greater input into county issues.

**PNG 2.1.4 Community-Based Meetings:** Organize community-based meetings, in partnership with existing community organizations, to inform and educate people on the issues and to seek their input. Community-based meetings should be held at different geographic locations around the county.

#### **Cross References and Notes:**

2. As with local and regional cooperation, public participation is one of the keystones of *Montgomery County, 2025*. Public participation is divided into two subcategories: public involvement (input) and public information (outreach).

<sup>3.</sup> Beyond the outreach methods incorporated under this goal, the plan includes a number of other methods in the introduction, planning, and subject specific chapters. These include: PLU 1.7.1 Village Planning Process (pg. 9); CRS 1.0 Historic Preservation (pg. 22); CRS 3.0 Cultural Facilities and Fine Arts (pg. 24); ECD 1.1 Montgomery County Regional Indicators Program (pg.); ECD 2.0 Workforce Development (pg. 100); EDU 2.0 Lifelong Learning Goal (pg. 30); ENV 3.0 Streams, Rivers, and Surface Waters (pg. 36); ENV 5.0 Groundwater (pg. 39); HSG 1.0 Livable Neighborhoods (pg. 48); SFY1.0 Public Safety (pg. 50); TRN 1.0 Land Use and Transportation (pg. 54); and UTL 3.0 Solid Waste (pg. 64).

**PNG 2.1.5 Public Hearings.** Hold joint public hearings with the Blacksburg Planning Commission or the Christiansburg Planning Commission on projects impacting both the county and the town.

**PNG 2.2 Informing the Public:** Inform citizens about how local government works, how local government interacts with state and federal government, and how they can make their views known to local government decision makers.

PNG 2.2.1 Public Information: Provide information on local government in plain language and in a variety of formats. Address a diverse population using speakers, newsletters and mailings, newspapers, television (network and cable), radio, and internet (web page and CD-ROM), etc. In addition, the County should provide access to all public information through the public libraries, both in print and electronic media.

PNG 2.2.2 Planner in the Public Schools: Design and implement a Planner/ Government Official in the Public Schools program in order to promote a better understanding of planning and zoning issues, government in general, and local government in particular, in the public schools. (5)

**PNG 2.2.3 Citizen Academies:** Use of citizen academies as a tool for informing the public about how local government works. (6)

#### **Cross References and Notes:**

4. Most, although not all, of the goals included in *Montgomery County*, 2025 have a public information component. In some cases, the specific approaches require the generation and distribution of materials; in other cases the specific approach requires distribution of existing materials available from other agencies. While most public information developed by Montgomery County originates from Office of Public Information, subject specific information (planning, zoning, parks and recreation, etc.) is also available from the specific departments.

5. The program would require working with the Social Science and Science coordinators for the Montgomery County Public Schools to design programs and classroom materials which would enhance students' understanding of local issues while working within the existing Standards of Learning framework.

6. Citizen Academies are currently used by the Sheriff's Department, although the approach could be used to increase interest in other areas of government, including planning, parks and recreation, and water quality and monitoring. Citizen academies are designed to provide members of the general public with a broader range of training and knowledge, while increasing the public's understanding and interaction with different parts of the governmental process.

**PNG 3.0** Access: Provide increased public access to existing facilities (schools, libraries, etc.) and to new facilities. New and rehabilitated facilities should be designed to accommodate several functions, such as gyms and meeting rooms, and be compliant with all applicable Americans With Disabilities Act (ADA) requirements.

**PNG 3.1 Multi-use of Facilities.** Develop and adopt a countywide policy for the multi-use of public facilities, including those owned by county government, parks and recreation, the Montgomery/Floyd Regional Library, and the Montgomery County Public Schools. (7)

**PNG 3.1.1 Multi-use Agreements.** Develop and adopt an agreement on the multi-use of publicly owned facilities (government buildings, libraries, schools, fire and rescue squad stations, and parks and recreational facilities) by individuals and community-based organizations, including standardized use regulations, policies, and fee structures.

PNG 3.1.2 Centralized Scheduling. Appoint a taskforce to study the feasibility of centralized, countywide scheduling of use of publicly owned facilities, including government buildings, libraries, schools, fire and rescue squad stations, and parks and recreational facilities.

PNG 3.1.3 New Facilities. Require that all new facilities be designed in such a way as to promote and accommodate multi-use by individuals, government agencies, and community-based organizations, in compliance with Americans with Disabilities Act (ADA), in order to facilitate the provision of human, health, recreation, and government services through a

### **Cross References and Notes:**

7. Multi-use of public facilities recognizes that the public's ability to use public facilities in a variety of fashions contains long-term costs while providing the public with greater opportunity, whether it is adult education and job training classes being held in the public library, schools making use of outdoor lab facilities in public parks, or parks and recreation programs utilizing school facilities. Multi-use of facilities is addressed in CRS 2.0 Montgomery Floyd Regional Library (pg. 23); EDU 1.1.2 Facilities Renewal Program (pg. 29); EDU 1.2.2 New Facilities (pg. 29); and EDU 2.2 Nontraditional Educational Facilities (pg. 30).

PNG 3.1.4 Community-Based Schools and Public Facilities Initiative. Study the feasibility of implementing the Community-based Schools and Public Facilities initiative, based on the Florida and West Virginia models, which allows for the provision of government, health and human service based services through the rural schools and public facilities (Elliston-Lafayette, Shawsville, Riner, Belview, and Prices Fork).

**PNG 4.0 Villages and Rural Communities:** Retain the viability and character of villages and rural communities found throughout the County. (9)

**PNG 4.1 Planning Process:** Involve residents of villages and rural communities in proactively planning for their future. Village and community residents need to be informed of planning tools such as "mixed uses" and "cluster development" in order that they can decide what may or may not be appropriate for their village/community.

PNG 4.1.1 Livable Communities. Develop policies which encourage the adoption of Traditional Neighborhood Design (TND) (10) and other design guidelines into the design process in order to maintain and produce livable communities. These principles provide a framework for and a greater potential benefit from cluster, mixed use, and planned unit development, especially in the context of villages and small communities. (11)

### **Cross References and Notes:**

9. Montgomery County, 2025 includes six designated villages: Belview, Elliston/Lafayette, Plum Creek, Prices Fork, Riner, and Shawsville. The village plans will become part of the this plan as they are adopted. Village planning is also addressed in PLU 1.7.1: Village Planning Process (pg. 9). Other village and rural community issues are included in CRS 1.0 Historic Preservation (pg. 22); EDU 1.1.1 Local and Neighborhood Facilities (pg. 29); and PRC 2.0 Recreational Facilities and Programs (pg. 53).

10. Traditional Neighborhood Design (TND) standards are addressed, in greater detail, in PLU 3.0 Community Design (pg. 19)

11. Livable neighborhoods and communities are central to residents' quality of life. Potential ideas for consideration include: 1. Maintain a clear edge with the countryside (delineate gateways, consider open space buffers, encourage infill development), 2. Build livable communities (compact form encourages walking, reassess zoning standards regarding setbacks and mixed uses), 3. Preserve historic resources (find new uses for old buildings), 4. Respect local character in new construction (ask franchises and chain stores to fit in, landscape commercial areas, control signs, disguise communication towers), and 5. Reduce the impact of the car (design streets healthy neighborhoods, build trails and greenways, reassess road standards). Source: "Better Models for Development in Virginia" by Edward T. McMahon. Livable neighborhoods and communities area also addressed in HHS 1.0 Livable Communities (pg. 46); HHS 2.0 Quality of Life (pg. 45); and HSG 1.0 Livable Neighborhoods (pg. 48).

### **Cross References and Notes:**

8. The Community-Based Schools and Public Facilities Initiative is also addressed in the Educational Resources Chapter (EDU 1.2, pg. 116).

**PNG 4.1.2 Planning for Villages:** Formulate a planning process whereby the County will jointly work with the residents of each village to prepare a village plan to guide their future development. Each village plan would be amended to the countywide Comprehensive Plan. (12)

# **PNG 4.1.3 Planning for Rural Communities:**

Formulate a planning process where by rural communities may apply to the County for assistance in preparing a community plan to guide their future development. (13)

**PNG 4.2 Public Facilities:** Locate new public facilities (schools, parks, ballfields, libraries, fire & rescue stations, collection sites, satellite offices, etc.) where they contribute to the viability and livability of established villages and rural communities.

**PNG 4.3 Zoning Changes:** Review and revise the Zoning Ordinance in order to support the future development of villages and small communities.

**PNG 5.0 Corridor Planning:** Identify areas of the county with unique growth characteristics that are appropriate for corridor planning and plan for them using the VA 177/Tyler Avenue Corridor plan as a model. (14)

# **Cross References and Notes:**

PNG 6.0 Tax Structure and Legislative Changes and Priorities: Reduce County dependence on the local real estate tax, while expanding local control of land use decisions and opportunities.

**PNG 6.1 Legislative Priorities:** Work with the Virginia Association of Counties (VaCo) and the Virginia Municipal League (VML) in their efforts to diversify the revenue sources available to local governments, while expanding local control of land use decisions and opportunities.

**PNG 6.1.1 Planning and Code of Virginia.** Conduct a review of land use related laws included in the Code of Virginia, updated annually, to determine the impact of changes on local land use practices and regulations.

PNG 6.1.1 Planning and Legislative Priorities. Work with the Board of Supervisors and County Administration to expand planning-based options in Montgomery County, including transfer of development rights, an adequate public facilities ordinance, and other innovative planning tools.

**PNG 7.0 Growth Impact:** Use financial options, including cash proffers, as a way to encourage new development to pay its "fair share" for the impacts of capital facilities costs associated with new development.

**PNG 7.1 Cash Proffers:** Develop cash proffer guidelines to address County capital facility needs such as schools, parks, libraries and fire & rescue facilities. (15)

**PNG 7.2 Capital Improvements Program (CIP):** Continue practice of annually developing a five-year CIP to identify future capital facility needs and the means for funding them. (16)

**PNG 7.3** Adequate Public Facilities Ordinance (APFO): Support state legislative efforts to allow local governments to approve APFOs.

#### **Cross References and Notes:**

15. Preliminary proffer guidelines are addressed in PLU 2.2 (pg. 14) 16. Capital Improvements Program is also addressed in the Implementation Strategies portion of the Introduction to the full plan; EDU 1.1.3 Facilities Renewal Program (pg. 29); PRC 2.1.2 Recreational Priorities and Funding (pg. 53); and SFY 1.3.2 Capital Facilities and Funding (pg. 51).

<sup>12.</sup> See footnote #8 for additional references.

<sup>13.</sup> Examples of rural communities in the county are Alleghany Springs, Ellett, Long Shop, Lusters Gate, McCoy, Pilot, Graysontown, etc. Planning and Rural Communities is addressed in PLU 1.3 (pg. 3).

<sup>14.</sup> Corridor Planning is also addressed in PLU 1.8.1 Corridor Planning (pg. 11), and TRN 2.4 Access Management (pg. 57).

# Cultural Resources: Goals

**CRS 1.0 Historic Preservation Goal:** Promote the preservation of the historical and cultural integrity of the built and natural environment, including individual structures, districts, and historically significant landscapes and viewsheds. (1)

CRS 1.1 Historic Villages, Districts, and Corridors: Develop and revitalize historically significant districts, villages (Riner, Prices Fork, Lafayette, Elliston, Shawsville, and Merrimac), and corridors (US 460/Rt 11 and Catawba).

CRS 1.1.1 Certified Local Government Program. Establish a countywide Certified Local Government program, as outlined under the Historic Preservation Act of 1966, including maintaining and updating the inventory of historic structures in Blacksburg, Christiansburg, and Montgomery County. Establishing a countywide Certified Local Government program would require a cooperative effort between Montgomery.

a countywide Certified Local Government program would require a cooperative effort between Montgomery County, Blacksburg, and Christiansburg, as well as the City of Radford. (2)

CRS 1.1.2 Historic Signage. Establish a systematic program, through the Department of Historic Resources Local Marker program, to provide historic markers, town markers, and appropriate historical signage, as well as an online and printed guide to the local markers, throughout Montgomery County, Blacksburg, and Christiansburg, in order to preserve the history of the area and promote the development of a viable history-based tourism industry. (3)

# **Cross References and Notes:**

1. Issues surrounding historic preservation are also addressed in the Planning and Land Use Policies (pages 35-50), specifically PLU 1.2.1 (f), PLU 1.3.2(b), PLU 1.4.2(d), PLU 1.5.2(b), PLU 1.6.4(d), PLU 1.7.4(a), and PLU 1.8.4(d). Flexible road standards is addressed in TRN 1.5 (pg. 56).

# **CRS 1.1.3 Historic Villages and Rural Communities.**

Maintain the viability and historic character of existing villages and rural communities by encouraging preservation of historic structures and preservation of the historic pattern of developed and undeveloped areas that define the villages, rural communities, and their boundaries.(4)

**CRS 1.2 Preservation of Individual Properties.** Promote the historic preservation of individual structures by providing local technical assistance to local landowners and developers.

CRS 1.2.1 Historic Preservation Easements. Target specific areas of the county for conservation and historic preservation easements, allowed under the Virginia Historic Preservation Easement Program (1996), thereby preserving both historic structures and districts by preserving the context in which they are situated and by affording long-term legal protection.

CRS 1.2.2 Regional Survey of Historic Resources Database and GIS Layers. Provide direct access to information on individual properties, within Montgomery County, to property owners by establishing, maintaining, and updating the County Survey of Historic Resources GIS database. (5)

**CRS 1.2.3 Public Information.** Provide public information on historic preservation and historic preservation easements to individual landowners and developers, including access to forms and a list of local preservation and easement specialists.

#### **Cross References and Notes:**

4. Land use policies for rural communities, villages, and village expansion areas are included in PLU 1.4: Rural Communities (pg. 4), PLU 1.6 Village Expansion Areas (pg. 7); and PLU 1.7: Villages (pg. 9).

<sup>2.</sup> The Certified Local Governments Program, established under the Federal Historic Preservation Act (1966) is administered by the Virginia Department of Historic Resources (DHR). Program requirements and benefits are available from the DHR. 3. State provisions for historic markers are included in sections 10.1-2209 and 10.1-2210 of the Code of Virginia.

<sup>5.</sup> Gibson and Charlotte Worsham conducted the initial survey of historic resources in Montgomery County in 1986. The survey culminated in the designation of 10 historic districts throughout Montgomery County, Blacksburg, and Christiansburg, including four village districts in the unincorporated portions of the County. The survey has not been updated since the initial survey. The initial database would be based on the Worsham survey.

**CRS 1.2.4 Preservation Incentives: Density Bonuses.** Provide incentives, including density bonuses, to developers to encourage the preservation of significant historic structures and viewsheds on property slated for development.

CRS 1.2.5 Preservation Incentives: Taxes. Proactively promote historic preservation by education landowners about the various state and federal tax benefits for historic preservation. Provide tax incentives, including a historic preservation land use tax program, which would allow for a reduction in real estate taxes for structures and properties which contribute to historic districts or viewsheds.

CRS 1.3 Historic Preservation and Tourism. Actively encourage the development of economic enterprises which maintain or enhance the historic nature of existing districts, including the development of tourism-based industries (bed and breakfasts, antique shops, gift shops, and attractions) and tourism corridor plans (eg. an antiques corridor along Rt. 11/460 or a Coal Mining Heritage Corridor). (6)

**CRS 2.0 Montgomery/Floyd Regional Library:** Provide increased access to high-quality library facilities throughout Montgomery County. (7)

**CRS 2.1 New and Existing Facilities and Programs.** Provide adequate public library facilities, based on population growth trends and need, throughout Montgomery County.

**CRS 2.1.1 Library Facility Standards.** Work with the Montgomery-Floyd Regional Library Board to establish a set of criteria for determining future physical library needs, including the resiting and upgrade of existing facilities and the siting of new facilities.

CRS 2.1.2 Public Information: Events and Programs. Establish a countywide public-information approach to the provision and promotion of library-based cultural and educational events and programs (special readings, art shows, book clubs, literacy and adult education programs, etc.).

CRS 2.1.3 Public Information: Technology. Work with the Montgomery-Floyd Regional Library Board to develop a library-based technology plan that will provide increased open access to technology-based public information, including: the provision of local, wired, public meeting rooms where citizens can watch and participate in public meetings; greater public webaccess; and increased electronic access to government forms, reports, and other documents.

**CRS 2.1.4 Library-Based Community Space.** Work with the Montgomery-Floyd Regional Library Board to develop of community meeting space in existing facilities and the design community multi-use facilities in new and rehabilitated facilities.

6. Tourism is supported by ECD 4.1.1 Entrepreneurial Economy (pg. 28). Eco- and Agri-tourism are addressed in ENV 2.1.7 (Rural Development Initiatives (pg. 34).

### **Cross References and Notes:**

7. The Montgomery/Floyd Regional Library is also addressed in PNG 3.1: Multi-Use of Public Facilities (pg. 19), PNG 3.1.4: Community-Based Schools and Public Facilities Initiative (pg. 20); EDU 1.2: Community-Based Schools and Public Facilities (pg. 29) and EDU 2.2.4: Montgomery/Floyd Regional Library (pg. 30)

**Cross References and Notes:** 

**CRS 3.0 Cultural Facilities & Fine Arts:** Provide increased access to and support of cultural facilities and opportunities, including both public and private museums, fine arts facilities, and performing arts venues.

CRS 3.1 Cultural Facilities, Programs, and Events. Work with local organizations to provide increased cultural displays, programs, and events at publicly-owned venues, including the County Government Center, Coal Mining Heritage Park and Science Center, parks and recreation facilities, and school facilities.

# CRS 3.1.1 Public Gallery / Exhibition Space.

Continue to provide gallery / exhibition space for local artists and artisans. Montgomery County currently provides publicly accessible gallery and exhibition space in the County Government Center, through a cooperative arrangement with the Blacksburg Arts Council, for local artists and artisans.

CRS 3.1.2 Public Support of Cultural Facilities and Programs. Continue County support of locally operated cultural facilities, including the Christiansburg Institute, Lyric Theater, and the Montgomery County Museum, while working with citizens groups to increase cultural opportunities in Montgomery County, including festivals, additional museum and gallery facilities, youth arts programs, and performance venues.

CRS 3.2 Heritage Parks & Trails System. Continue to develop the of Heritage Parks and Trails System to connect public, nonprofit, and private heritage and cultural sites or nodes (Coal Mining Heritage Park at Merrimac and the Farm Heritage Park at Riner), while providing venues for local cultural events (Coal Mining Heritage Day, Riner Heritage Day, etc.), artisans (an artisans' market), and performers (small performance and demonstration facilities) celebrating elements of Montgomery County's heritage. (8)

**CRS 3.2.1 Coal Mining Heritage Park.** Continue to implement the master plan for the Coal Mining Heritage Park, in partnership with the Coal Mining Heritage Association and other interested individuals and organizations.

**CRS 3.2.2 Riner Branch, Montgomery County Museum.** Develop, through a public private partnership, the Riner Branch of the Montgomery County Museum, including the cannery and the cabin located on the Auburn High School grounds, immediately south of Auburn High School.

**CRS 3.2.3 Farm Heritage Park**. Create a master plan for the development of a Farm Heritage Park in Riner, in partnership with Radford University, Virginia Tech, the Friends of Riner, Montgomery County Museum, agricultural and farm organization, and the Agricultural Extension Service.

#### **Cross References and Notes:**

8. Heritage parks are also addressed in EDU 2.2: Non-traditional Educational Facilities (pg. 30) and PRC 2.0 Recreational Facilities and Programs (pg. 53).

# **Economic Resources: Goals**

ECD 1.0 Economic Development, Land Use, & Quality of Life.

Actively promote economic development in the region, which takes a sustainable approach to the environmental, social, cultural, and economic integrity of the county and which contributes to the quality of life.

**ECD 1.1 Montgomery County Regional Indicators Program** 

Design and implement a regional indicators program, incorporating physical, social, cultural, and economic benchmarks, in order to provide local jurisdictions (Montgomery County, Blacksburg, Christiansburg, and the City of Radford) with a method of defining success, tracking progress, and flagging problems to be addressed. (1)

ECD 1.1.1 Quality of Life Committee. Appoint a Quality of Life Commission, to oversee the formation, implementation, and maintenance of the Montgomery County Regional Indicators Program. Membership should represent all of the stakeholders and be drawn from current county commissions and boards (Planning Commission, Economic Development Commission, Human Relations Council, etc.), citizen organizations, and the educational and business communities. (2)

**Cross References and Notes:** 

1. The Planning Commission initially explored the use of indicators in 2002, in conjunction with a project by graduate students in the Virginia Tech Urban Affairs and Planning Environmental Planning Studio course. A preliminary list of indicators have been included in the introductions of each chapter and an index of indicators is included in the appendix. Additional references to the indicators program are included in the "implementation" portion of the Introduction (pg. 12 of full plan). 2. Quality of life is, in many respects, subjective, although there are key indicators which are generally used to gauge a locale's overall quality of life, including economic opportunity and income, housing affordability, educational quality and resources, and community amenities. While the majority of this plan, in one form or another, addresses quality of life issues, albeit indirectly, the issue is directly addressed in the Health and Human Resources chapter: HHS 2.0 Quality of Life (pg. 45).

**ECD 1.2 Mixed Use Development.** (3) Encourage the use of mixed-use and campus design approaches to new business and industrial developments.

**ECD 1.3 Future Land Use Requirements**. Require the expansion of future economic development to be located in areas of the county which are designated as urban expansion, village expansion, or villages.

ECD 1.4 Economic Development Strategic Plan: Work with the Economic Development Department and the Economic Development Commission to actively update and implement the applicable portions of the Economic Development Strategic Plan, including areas concerned with land use, workforce development, and business retention and growth. (4)

#### Cross References and Notes:

3.. Additional references to mixed use development are included in: PNG 4.0 Villages and Rural Communities (pg. 20); PLU 1.6 Village Expansion Areas (pg. 7); PLU 1.7 Villages (pg. 9); PLU 1.8 Urban Expansion Areas (pg. 11); HHS 2.0 Quality of Life (pg. 45); HSG 1.0 Livable Neighborhoods (pg. 48); and PRC 2.3 Trails (pg. 53) 4. The work group cited specific sections of the Economic Development Strategic Plan for four subjects:

a) Workforce (Join forces with a regional-wide workforce development task force; survey target industries to assess labor market demand; Develop an action plan to increase the available IT skilled workforce; Advocate for a Comprehensive Vocational Training Facility to serve the County; Connect vocational training with the needs of existing targeted industries).

b) Development (Expand the main industrial parks available industrial property; Develop new shell building in Christiansburg; Develop minimum investment criteria for locating in Montgomery County's available industrial parks; Identify sites with the greatest marketing potential/appeal and focus resources; Establish viable real estate development partnerships to encourage speculative building on sites; Educate communities about Economic Development Department's marketing and client management strategies).

c) Program (Mobilize community resources to support local business development; Cooperate with Blacksburg and Christiansburg to interview and profile local businesses; Develop local industry database, with linkages, as a marketing tool; Encourage local participation in regional initiatives; Publish inventory of local resources; Promote business retention and expansion programs).

d) Marketing and Recruitment (Create a technology zone; Enroll local business leaders in target marketing efforts; Restructure incentives in ways that favor the development of industries in target sectors and the creation of primary and/or family wage jobs.

**ECD 2.0 Workforce Development:** Develop a local workforce with the skills, training and experience necessary to succeed and advance in the job market of the future. (5)

# **ECD 2.1 Public Education and Workforce Development:**

Actively promote technical and professional training and workforce development for current and future workers in Montgomery County, which is necessary for future success.

ECD 2.1.1 Community Technical Education/
Knowledge Capital Task Force: Recognizing that
knowledge-based capital is one of the region's strengths,
appoint a task force to 1) evaluate knowledge-based
capital in the Montgomery County MSA, as well as
current student and adult educational and vocational
training opportunities and facilities; 2) develop a long
range plan for workforce development that addresses
long-range needs and objectives; and 3) design and
promote training and retraining programs which will
benefit students, workers, and area businesses and
institutions. (6)

ECD 2.1.2 Vocational / Technical Skills: Work with high school vocation / technical directors, guidance counselors, and others in the Montgomery County Public Schools to provide new programs and strengthen existing programs intended to develop marketable skill sets for non-college bound students.

# **ECD 2.1.3 Worker Retraining:**

Working with the area businesses, the Montgomery County Public Schools, New River Community College, and the two universities, provide programs

# **Cross References and Notes**

5. Workforce development is also addressed in EDU 2.1 Job and Vocational Education (pg. 30) and HHS 2.0 Quality of Life (pg. 45). Issues surrounding diversity, living wage, accessibility, and expanded opportunities are addressed in HHS 2.2: Economic Development (pg. 45).

6. The task force should be made up of members from the Montgomery County Public Schools, the New River Community College, Virginia Tech, Radford University, local businesses, the Montgomery County Economic Development Department, the Montgomery County Economic Development Commission, and the Board of Supervisors, and representatives from Blacksburg and Christiansburg. The Community Technical Education/ Knowledge Capital Task Force is cross listed as EDU 2.1.1 (pg. 30)

to retrain existing workers to meet the challenges and needs of a changing economy.

**ECD 2.2 Future Workforce Development:** Provide new workers with the skills and training necessary to succeed in the future.

**ECD 2.2.1 Technical and IT Training:** Increase the number of skilled IT workers in the New River Valley. Provide more required and elective IT courses in the public schools.

**ECD 2.2.2 New Workers**: Attract to Montgomery County and the New River Valley new workers with target industry skills.

**ECD 2.2.3 Retention of College Graduates:** Retain IT skilled individuals graduating from local universities and colleges in the local work force.

- **ECD 3.0 Location and Land Use:** Identify appropriate locations for new businesses to start and existing businesses to expand. (7)
  - **ECD 3.1 Industrial & Business Parks:** Identify locations for new industrial and business parks and/or the expansion of existing parks.
    - **ECD 3.1.1 Product Inventory:** Set county objectives for locations and square footage to be developed in order to have "product" in inventory.
    - **ECD 3.1.2 Partnership Agreements:** Work cooperatively with other localities in the development of regional business and industrial parks.
  - **ECD 3.2 Zoning.** Review and revise the Zoning Ordinance to allow for innovative approaches to the design and organization of industrial, light industrial, and business parks and business districts.
    - **ECD 3.2.1 Campus Settings:** Promote mixed use approaches (campus settings) mixing commercial, industrial, academic, and residential land uses, to the development of future business parks.
    - **ECD 3.2.2 Two-Plus Story Structures:** Consider increasing the intensity of selected business parks by going 2+ stories in height rather than single story buildings.
    - **ECD 3.2.3 Smaller Sites:** Promote the development of smaller (2 to 5 acre) industrial sites within business and industrial parks.

ECD 3.2.4 Flex-Industrial Zoning: Review and revise the County Zoning Ordinance to allow flex-industrial uses, by special use permit, in the GB General Business and M-1 Manufacturing zoning districts within the Villages, Village Expansion and Urban Expansion Areas. (8)

**ECD 3.1.6 Research & Development Zoning:** Review and revise the County Zoning Ordinance to allow research & development uses in the M-1 Manufacturing zoning district.

**ECD 3.3 Downtown Revitalization:** Encourage the adaptation and reuse of existing buildings in downtown locations. (9)

**ECD 3.2.1 Technology Zone:** Consider development of a technology zone for downtown Christiansburg. (10)

**ECD 3.2.3 Fiber Optics:** Extend fiber optic capabilities in downtown areas. (11)

**ECD 3.2.3 Downtown Courthouse:** Maintain County Courthouse in downtown Christiansburg.

# **Cross References and Notes**

<sup>7.</sup> Issues surrounding business location and land use are also addressed in the Land Use Policies, included in the Government and Land Use Chapter. For more specific information, see PLU 1.6 Village Expansion Areas (pg. 7); PLU 1.7 Villages (pg. 9); and PLU 1.8 Urban Expansion Areas (pg. 11). Additional references to the siting of business and industrial areas is included the Environmental Resources chapter, including ENV 3.0 Streams, Rivers, and Surface Waters (pg. 36); ENV 5.0 Groundwater (pg. 39); and ENV 6.0 Karst (pg. 42). Transportation related issues are addressed in TRN 1.4 Connectivity and Access Management (pg. 55).

<sup>8.</sup> The Zoning Ordinance defines flex industrial as Light industrial activities that occur in buildings of no more than two stories in height, with one or more loading docks, and not more than half of the gross floor area used for offices.

<sup>9.</sup> Downtown revitalization, as it relates to historic preservation, is included in CRS 1.0 Historic Preservation (pg. 22).

<sup>10.</sup> Technology infrastructure, including telecommunications towers, is also addressed in UTL 2.0 Electric, Telecommunications, and Gas Utilities (pg. 63).

<sup>11.</sup> Fiber-optic networks are also addressed in UTL 2.3: Broadband/Fiber-optic Networks (pg. 63).

**ECD 4.0 Attraction & Retention of Business and Industry:** Attract new and retain existing businesses and industries that can best create viable job opportunities for all, expand the local tax base and maintain those qualities that make the County a highly desirable place to live and work.

**ECD 4.1 Internal Focus:** Encourage the growth of new and existing businesses and industries presently located in the county.

**ECD 4.1.1 Entrepreneurial Economy**: Encourage entrepreneurship and small business startups by county residents, including industrial, commercial, tourismbased, recreational and agricultural enterprises.(12)

**ECD 4.1.2 Expansion Incentives:** Develop financial incentives for existing businesses that meet growth objectives. Financial incentives for growth of existing businesses should be equivalent to financial incentives used to attract new businesses.

**ECD 4.1.3 Visitation Program:** Continue visitation program with existing businesses.

### **Cross References and Notes**

12. Small business development issues are also addressed in the Environmental Resources and Cultural Resources chapters of this plan. For additional references on Agriculture-related economic development, see ENV 2.1.7 Rural Development Initiatives (pg. 34). Cultural and historic tourism and historic tourism corridors are addressed in CRS 1.3 Historic Preservation and Tourism (pg. 23). Recreational tourism and enterprises are addressed in PRC 2.4 Commercial Recreational Facilities (pg. 53).

**ECD 4.2 External Focus:** Attract new businesses and industries to the county primarily from the four sectors (transportation, plastics & polymers, biotechnology and information technology) targeted in the Economic Development Strategic Plan.

**ECD 4.2.1 Air Transportation:** Support development of good air transportation service in order to complete in a global economy. (13)

**ECD 4.2.2 Rail Transportation:** Support passenger rail service to Christiansburg and improved freight rail service along the Interstate 81 corridor. (14)

**ECD 4.2.3 Retail Quality:** Recognize that the presence of upscale retailers is an important consideration for many locational decisions. Therefore support development of a quality regional mall.

**ECD 4.2.4 College Graduates Data:** Include college students that have graduated or are going to graduate in labor market figures.

**ECD 4.3 Local Tax Structure:** Evaluate the implications of state changes to the local tax structure and the impact on current and future economic development. (15)

- 13. Air transportation is addressed in TRN 5.1 Air Transportation (pg. 60).
- 14. Rail transportation is addressed in TRN 5.2 Rail Transportation (pg. 60).
- 15. Issues surrounding the local tax structure are addressed in PNG 6.0 Tax Structure and Legislative Changes and Priorities (pg. 21). Issues related to public funding sources, including cash proffers, are addressed in PNG 7.0 Growth Impact (pg. 21); PLU 2.2 Proffer Guidelines (pg. 14); PRC 2.0 Recreational Facilities and Programs (pg. 53); and SFY 1.3 Future Capital Facilities (pg. 50).

# **Educational Resources: Goals**

**EDU 1.0 Educational Facilities and Opportunities:** Provide high quality, lifelong educational opportunities and facilities throughout Montgomery County.

**EDU 1.1 New and Existing Educational Facilities:** Address current and future educational facility and program needs in Montgomery County through a cooperative approach between Montgomery County, Blacksburg, Christiansburg, citizens, the business community, and the Montgomery County Public Schools.

# **EDU 1.1.1 Local and Neighborhood Facilities.**

Develop a policy to maintain the neighborhood, village approach to the placement of elementary schools, recognizing that such schools provide an identity of the area they are meant to serve and aid in the positive development and maintenance of community identity.(2)

**EDU 1.1.2 Facility Standards.** Develop and adopt a mutually acceptable planning standard for school facilities, including renovation standards and a mobile classroom policy.

**EDU 1.1.3 Facilities Renewal Program**: Design and incorporate a Facilities Renewal Program into the Montgomery County Capital Improvements Program, which would allow for large scale renewal, renovation, and expansion of existing facilities to meet future needs, including: physical upgrade, systemic upgrades (i.e. electrical, hvac, roofs), and facility changes for programmic upgrades (renewal/rehabilitation of science, vocational and technological facilities), while recognizing the need for multi-use facilities. (3)

### **Cross References and Notes:**

2. The retention of Village-based facilities underscores the observation that "Villages have served as, and will continue to serve as focal points, for surrounding rural areas" (PLU 1.7, pg 43). Village Area Facilities and Utilities are addressed in PLU 1.7.5 (pg. 11). Additional information on Villages (PLU 1.6, pg. 41) and Village Expansion Areas (PLU 1.7, pg. 43) can be found in the Planning and Land Use chapter.

3. The capital improvements program is also addressed in the plan implementation portion of the Introduction; PNG 7.2 Capital Improvements Program (pg. 21); PRC 2.1.2 Recreational Priorities and Funding (pg. 53); and SFY 1.3.2 Public Safety Facilities and Funding (pg. 51).

**EDU 1.1.4 Landbanking**: Land bank sufficient land for future educational uses, including the expansion of existing facilities and the construction of new facilities.

**EDU 1.1.5 Decommissioned & Abandoned Structures:** Develop a policy for publicly owned, decommissioned or abandoned structures, including facilities owned by Montgomery County, the Montgomery County Public Schools, and other applicable agencies and departments.

**EDU 1.2 Community-Based Schools and Public Facilities:** Develop a Community-Based Schools approach to the provision of public, health, and educational services, through the location and provision of such services through the schools. Recognizing the importance of the schools to the fabric of local communities and neighborhoods (4)

**EDU 1.2.1 New Facilities.** Develop a policy for the design of new school facilities which would accommodate multi-use, including a combination of community-based human, health, recreational, and government services. (5)

**EDU 1.2.2 Civic Zoning.** Create a special school/civic zoning district which would allow a broader range of activities to be performed in civic structures, including: the provision of human, health, and government services; child care; and before and after school programs.

<sup>4.</sup> Community-Based Schools and Public Facilities are also addressed in PNG 3.1.4 (pg. 20).

<sup>5.</sup> Issues of access and multi-use of facilities are addressed in PNG 3.0: Access (pg. 19); PNG 3.1: Multi-use of Facilities (pg. 19); CRS 2.1.4: Library-Based Community Space (pg. 23); and PRC 1.1.4 Facility Sharing (pg. 52).

**EDU 2.0 Lifelong Learning.** Adopt a countywide approach to lifelong learning needs, including: 1) the development of adult education and job training facilities and programs; 2) development and provision of child care programs and facilities (pre-K, K-12 before and after school programs and facilities, and at-risk youth programs and facilities); and 3) nontraditional educational programs and facilities.

**EDU 2.1 Job and Vocational Education.** Explore the expansion of university, community college, vocational, and technical programs in Montgomery County through the reuse of abandoned or decommissioned educational facilities and funded through public/private partnerships.

**EDU 2.1.1 Technical and Vocational Training Opportunities.** Prepare a study, in conjunction with Economic Development, Montgomery County Social Services, and the Montgomery County Public Schools, that examines current and future technical training and vocational training needs in Montgomery County and recommends possible approaches to the provision of new or upgraded vocational and technical training facilities and programs. (6)

ECD 2.1.2 Community Technical Education/
Knowledge Capital Task Force: Recognizing that
knowledge-based capital is one of the region's strengths,
appoint a task force to 1) evaluate knowledge-based
capital in the Montgomery County MSA, as well as
current student and adult educational, technical, and
vocational training opportunities and facilities; 2)
develop a long range plan for workforce development
that addresses long-range needs and objectives; and
3) design and promote training and retraining programs
which will benefit students, workers, and area
businesses and institutions. (7)

**Cross References and Notes:** 

**EDU 2.2 Nontraditional Educational Facilities.** Continue to develop nontraditional educational facilities (such as the Coal Mining Heritage Park and Science Center, the Farming Heritage Park, the Christiansburg Institute, Blacksburg's Heritage Community Park and Natural Area, and the Montgomery County Museum) to provide expanded educational opportunities through public/private partnerships.

**EDU 2.2.1 Coal Mining Heritage Park Educational Facilities .** Continue to develop the historic and scientific educational facilities and programs in the Coal Mining Heritage Park, (8)

**EDU 2.2.2 Farming Heritage Park Educational Facilities:** Develop the historic and agricultural educational facilities at a Farming Heritage Park, including the establishment of facilities and programs supporting agricultural extension, 4-H, and Future Farmers of America.

EDU 2.2.3 Christiansburg Institute and Christiansburg Community Center. Support the development of alternative educational and museum facilities and programs at the Christiansburg Institute and Christiansburg Community Center (original Christiansburg Institute), focusing, specifically, on the needs of minority communities in Montgomery County. (9)

**EDU 2.2.4 Montgomery-Floyd Regional Library.** Provide continuing support for the Montgomery-Floyd Regional Library, including the development of new facilities, the revitalization of existing facilities, and the expansion of the technical infrastructure in support of adult educational opportunities. (10)

<sup>6.</sup> Technical and Vocational Training is also addressed in: ECD 2.0 Workforce Development (pg. 26) and HHS 2.4 Technical and Vocational Education Facilities and Programs (pg. 45).

<sup>7.</sup> EDU 2.1.2 is cross listed as ECD 2.1.1: Community Technical Education/ Knowledge Capital Task Force (pg. 26).

<sup>8.</sup> Heritage Parks are also addressed in CRS 3.2: Heritage Parks and Trail System (pg. 24) and PRC 2.0 Recreational Facilities and Programs (pg. 53).

<sup>9.</sup> Although the Christiansburg Institute and the Christiansburg Community Center, located, respectively, west of Franklin Street and next to Schaffer Memorial on High Street in Christiansburg, are outside of the jurisdiction of this plan, the work performed benefits all Montgomery County residents. In the past, Montgomery County has been asked to support and lend expertise to the development process of both institutions. Participants in the Cultural and Educational Facilities workgroup felt strongly that this support should be recognized and continued.

<sup>10.</sup> The Montgomery-Floyd Regional Library is also addressed, in greater detail, in CRS 2.0 (pg. 23).

# **Environmental Resources: Goals**

**ENV 1.0 Natural Resource Stewardship:** The County is committed to preserving, conserving, and managing its natural resources, as a sustainable asset, for the benefit of its citizens and future generations.

**ENV 1.1 Stewardship:** Encourage funding of Department of Forestry and Virginia Extension Service programs to help encourage good stewardship of Montgomery County's natural resources.

**ENV 1.2 Resource Management:** Encourage the use of Forestry and Agriculture Best Management Practices (BMP's). (9)

ENV 1.3 Environmental Planning and Mapping: Develop a natural and critical resources geographic information system to facilitate effective environmental planning in Montgomery County, including: Critical Resources Map; Comprehensive Plan; Land Use Policy Map; Comprehensive Plan GIS Significant historic structures and districts (see Cultural Resources chapter); Groundwater and surface water resources; Floodplains; Karst terrain; Soils; Vegetation; Geology and geologic features (other than karst); Rare and endangered species; Well and septic systems; Agricultural and Forestal Districts; Conservation easements; and State and federal lands. (10)

**ENV 1.3.1 Environmental GIS Program:** Initiated a mapping program to produce large-scale maps optimal for environmental planning for the entire county. Maps should be produced at a scale of 1:2,400 with a 5-foot contour interval for the fast growth areas

### **Cross References and Notes:**

of the county, and a scale of 1:4,800 with a 10-foot contour interval for slow growth areas of the County. **ENV 1.3.2 Well and Septic GIS Data:** Work with the NRV Health Department to expand a current Floyd County program for gathering GPS data on new septic and well systems into Montgomery County. Use the GPS data to develop a GIS-based location map for septic systems and wells that can tie into the database to easily monitor areas where septic failures and well contamination are concentrated. (11)

ENV 1.3.3 Bedrock Geology Maps: Create bedrock geology maps, similar to Geology of the Blacksburg Quadrangle, Virginia, for areas of Montgomery County in the following United States Geological Survey Quadrangle Maps: Eggleston, Newport, McDonalds Mill, Glenver, Elliston, Ironto, Radford North, Radford South, Riner, Pilot, Check, Indian Valley, and Alum Ridge. Priority should be given to the fast developing areas around Blacksburg, Christiansburg, and Radford.

**ENV 1.3.4 Karst GIS Database:** Identify and provide information that will be useful in land use decision making for each sinkhole, sinking creek, cave, karst spring, etc. This information should include, at a minimum, the precise location (recorded by GPS), type, and size of the karst feature, as well as issues of concern that may require future monitoring of the feature. (12)

**ENV 1.3.5 Floodplain Mapping:** Improve and update existing floodplain mapping data through continued requests to FEMA, while utilizing the resources of educational institutions, to re-delineate County floodplain boundaries. (13)

#### **Cross References and Notes:**

11. Well and Septic Systems are also addressed in ENV 3.3: Individual Septic Systems (pg. 37); ENV 5.1: Septic Systems and Well Water Testing (pg. 39); ENV 5.2.1 Septic System Maintenance (pg. 40); ENV 5.2.2: Alternative Wastewater Processing Systems (pg. 40); ENV 5.3 Groundwater Quality Protection Programs and Policies (pg. 40); ENV 5.5.3: Wastewater/water Recycling and Reclamation Programs (pg. 41); ENV 5.7.2 Well Testing (pg. 41); UTL 1.3 Private Systems (pg. 62); and UTL 1.4 Individual Systems (pg. 62).

12. Issues surrounding Karst are covered in greater detail in ENV 6.0: Karst (pg. 42). 13. Floodplains are addressed in greater detail in ENV 4.0 (pg. 38).

<sup>9.</sup> Best Management Practices (BMPs) are also encouraged in other sections of the Environmental Resource Goals, including: ENV 1.5: Water Quality (pg. 32); ENV 3.1 Agricultural Programs and Practices (pg. 36); ENV 5.5.2 Groundwater: Best Management Practices (pg. 40); ENV 6.5.3 Karst: Erosion and Sediment Control (pg. 42); ENV 6.6 Karst: Best Management Practices (pg. 43); and ENV 7.1.5 Stormwater and Erosion Best Management Practices (pg. 44).

<sup>10.</sup> The environmental layers are part of a larger GIS system which Montgomery County is currently developing. GIS strategies are also include in Cultural Resources (CRS 1.2.2, pg. 22), Health and Human Services (HHS 3.2.2, pg. 46), Public Safety (SFY 1.1.5, pg. 50), Transportation (TRN 1.1.2, pg. 54), and Utilities (UTL 1.4.3, pg. 63)

**ENV 1.4 Wildlife Corridors:** Establish green spaces, including corridors and greenways, that promote viable wildlife habitat.

**ENV 1.5 Water Quality**: Develop and initiate water resource management and Best Management Practices (BMPs) to preserve and maintain ground and surface water quality. (14)

**ENV 1.6 Air Quality:** Routinely monitor air quality in the County to determine if air quality is declining.

**ENV 1.6.1 Mass Transit:** Encourage the use and development of mass transit systems in the County. (15)

**ENV 1.6.2 Monitoring Station:** Work with the Department of Environmental Quality and area universities to establish an air monitoring station in the Montgomery County.

**ENV 1.7 Species Protection:** Protect threatened and endangered plant and animal species in the County. Wildlife habitat

management is a critical component due to the increasing development in the county.

**ENV 2.0 Open Space and Natural Resource :** To work with county residents to conserve the natural resources and agricultural character of the land in the county. (16)

**ENV 2.1 Private Open Space:** Encourage the preservation of the rural and agricultural character of private land within the County through cooperative efforts with local landowners.

**ENV 2.1.1 Special Service Districts** 

**ENV 2.1.2 Community Development Authorities** 

**ENV 2.1.3 Agricultural/Forestal Districts** 

**ENV 2.1.4 Sliding Scale Zoning** 

**ENV 2.1.5 Rural Cluster Zoning** 

**ENV 2.1.6** Conservation Easements

**ENV 2.1.7 Rural Development Initiatives** 

**ENV 2.1.8** Use Value Assessment

ENV 2.1.9 Urban Growth Boundaries [Urban and Village Expansion Areas]

**ENV 2.1.12 Conservation Easements and Virginia Scenic Byways** 

**ENV 2.2 Public Open Space:** Encourage the acquisition and development of additional active and passive parklands and open space with the cooperation of Blacksburg, Christiansburg, Virginia Tech, and other related entities.

ENV 2.1.6 Conservation Easements ENV 2.1.10 Public Land Acquisition Program ENV 2.1.12 Conservation Easements and Virginia Scenic Byways

**ENV 2.3 Viewsheds:** Develop and enact a plan of action for the protection and preservation of the scenic byways and transportation corridors, rivers, tributaries, and ridgelines. (17)

ENV 2.1.1 Special Service Districts ENV 2.1.2 Community Development Authorities

#### **Cross References and Notes:**

#### **Cross References and Notes:**

16.See the end of section 2.0 for the detailed list of strategies included in this section. 17. Scenic locations include Scenic Byways/Viewsheds (Route 8, Catawba Road, Prices Fork Road, Interstate 81, and Route 460), Rivers and Tributaries (New River, Little River, and North and South Forks of Roanoke River), and Ridgelines (Brush Mountain, Prices Mountain, and Paris Mountain).

<sup>14.</sup> Groundwater concerns are addressed in ENV 5.0 (pg. 39) and ENV 6.0: Karst (pg. 42). Surface water concerns are addressed in ENV 3.0: Streams, Rivers, and Surface Waters (pg. 36) and ENV 4.0 Floodplains (pg. 38).

<sup>15.</sup> Mass Transit is also addressed in HHS 2.3 Transportation (pg. 45) and TRN 3.0: Mass Transit (pg. 46).

- **ENV 2.1.4 Sliding Scale Zoning**
- **ENV 2.1.5 Rural Cluster Zoning**
- **ENV 2.1.6** Conservation Easements
- **ENV 2.1.7 Rural Development Initiatives**
- **ENV 2.1.8** Use Value Assessment
- ENV 2.1.9 Urban Growth Boundaries [Urban and Village Expansion Areas]
- **ENV 2.1.10 Public Land Acquisition Program**
- **ENV 2.1.12 Conservation Easements and Virginia** Scenic Byways
- **ENV 2.4 Forest Land**: Minimize the loss of the County's productive forestlands.
  - **ENV 2.1.3** Agricultural/Forestal Districts
  - **ENV 2.1.6** Conservation Easements
  - **ENV 2.1.7 Rural Development Initiatives**
  - **ENV 2.1.8 Use Value Assessment**
  - ENV 2.1.9 Urban Growth Boundaries [Urban and Village Expansion Areas]
  - ENV 2.1.11 Educational and Informational Distribution Program
  - **ENV 2.1.12 Conservation Easements and Virginia Scenic Byways**
- **ENV 2.5 Agriculture:** Maintain the agricultural land in various types of active production and discourage its conversion to other land uses.
  - **ENV 2.1.3 Agricultural/Forestal Districts**
  - **ENV 2.1.4 Sliding Scale Zoning**
  - **ENV 2.1.5 Rural Cluster Zoning**
  - **ENV 2.1.6 Conservation Easements**
  - **ENV 2.1.7 Rural Development Initiatives**
  - **ENV 2.1.8** Use Value Assessment
  - ENV 2.1.9 Urban Growth Boundaries [Urban and
    - Village Expansion Areas]
  - **ENV 2.1.11 Educational and Informational Distribution Program**
  - **ENV 2.1.12 Conservation Easements and Virginia Scenic Byways**
- **ENV 2.6 Open Space Corridors**: Create a countywide greenway plan which would include a riverside protection plan for the New, Roanoke, and Little Rivers and their tributaries.

- **ENV 2.1.1 Special Service Districts**
- **ENV 2.1.2 Community Development Authorities**
- **ENV 2.1.3 Agricultural/Forestal Districts**
- **ENV 2.1.4 Sliding Scale Zoning**
- **ENV 2.1.5 Rural Cluster Zoning**
- **ENV 2.1.6** Conservation Easements
- ENV 2.1.9 Urban Growth Boundaries [Urban and Village Expansion Areas]
- **ENV 2.1.10 Public Land Acquisition Program**
- ENV 2.1.11 Educational and Informational Distribution Program
- **ENV 2.1.12 Conservation Easements and Virginia Scenic Byways**
- **ENV 2.7 Land Trust Support Objective:** Support, through policy and funding measures, land trusts for the New River Valley that coordinate conservation easement programs and other land conservation transactions, such as the donation and purchase of easements. Develop a program for the County to hold interest in conservation easements.
  - **ENV 2.1.6** Conservation Easements
  - **ENV 2.1.11 Educational and Informational Distribution Program**
  - **ENV 2.1.12 Conservation Easements and Virginia Scenic Byways**
- **ENV 2.8 Inter-Authority Planning Cooperation:** Initiate cooperation among Montgomery County, Blacksburg, Christiansburg, Radford, Virginia Tech, Radford University, as well as surrounding counties to coordinate their plans to prevent gaps in rivershed and viewshed protection projects and stretch open space protection budgets by pooling talents and resources.
  - **ENV 2.8.1 Representative County Planning Group:** Create a team of county representatives responsible for bringing county interests to the attention of the Virginia Tech, Blacksburg, Christiansburg, and Radford planning agencies.
  - **ENV 2.8.2 Cooperative Area Plans:** Create and implement action plans for those areas identified in Objective 8, Milton Herds 2002 report, as well as those

areas identified by the Representative County Planning Groups.

ENV 2.1.1-12 Approaches to Open Space and Agricultural Preservation: (18)

**ENV 2.1.1 Special Service Districts:** Special Service Districts (SSDs) are created by passage of an ordinance by the Board of Supervisors. They require an organized plan and dedicated board to carry out the goals, which could be tailored to open space preservation. SSDs can be used to preserve open space by allowing a designated board to purchase development rights with the money raised from special real estate taxes.

# **ENV 2.1.2 Community Development Authorities:**

Community Development Authorities (CDAs) are very similar to Special Service Districts but are allowed specifically to raise funds to purchase easements and development rights. The other key difference is that Authorities can take on long-term debt allowing them to issue revenue-generating bonds as a means of producing income.

# **ENV 2.1.3 Agricultural/Forestal Districts:**

Agricultural/Forestal Districts are rural zones that have been reserved for the production of agricultural products and timber. Established as a local planning tool in the 1970s by the General Assembly, they are established according to state guidelines with the approval of the local governing body. A district constitutes a voluntary agreement between landowners and the government that no new, non-agricultural uses will take place in the district. An agricultural/forestal district provides much stronger protection for farmers and farmland than does traditional zoning, because it assures that the Use Value Assessment will continue to be available to landowners within the district. Participation in an agricultural/forestal district can also provide protection from local nuisance ordinances. To encourage agricultural/forestal district participation and to reflect the 8-year commitment by landowners, the County should consider local tax

### **Cross References and Notes:**

18. Development in the agricultural and forested areas of the County are discussed in greater detail in PLU 1.2: Resource Stewardship Areas (pg. 1) and PLU 1.3: Rural Areas (pg. 3).

19. Land Use Assessment is currently used in Montgomery County.

incentives above and beyond those currently provided through the Land Use Assessment program. (19) **ENV 2.1.4 Sliding Scale Zoning:** (20) Sliding Scale Zoning is a method of zoning requiring that the larger the initial size of the parent parcel prior to subdividing, the lower the permitted density. The permitted density decreases on a sliding scale as the size of the parent parcel increases. The rationale is that higher densities should be allowed on smaller tracts because they are difficult to farm and may have already moved out of agriculture and into the residential land market. Minimum lot size is usually set at 1 acre or a maximum of 2 acres and a large number of acres can be utilized for open space.

**ENV 2.1.5 Rural Cluster Zoning:** Rural Cluster Zoning allows a relatively significant amount of residential development to occur in rural and farming areas while at the same time ensuring that such development is designed and laid out to have the least possible impact on the landscape and to preserve large chunks of open space land even after development is complete.

ENV 2.1.6 Conservation Easements: Conservation Easements are restrictions placed on a parcel of land by its owner that limit how the land may be used in the future. Based on the owner's decision, a conservation easement may be used to prevent the future conversion of land from its present state to residential, commercial, or other uses. The placement of a conservation easement on a land parcel is totally voluntary and, in most cases, results in tax benefits for the owner. Conservation easements may be used alone or in combination with a local Purchase of Development Rights (PDR) program. (21)

# **ENV 2.1.7 Rural Development Initiatives: (22)**

# **Cross References and Notes:**

20. Sliding scale zoning is currently utilized in the A-1 (Agriculture) and C-1 (Conservation zoning districts).

<sup>21 &</sup>quot; A Model Purchase of Development Rights (PDR) Program for Virginia" (April 2004) Virginia Department of Agriculture and Consumer Services and Farmland Preservation Task Force.

<sup>22.</sup> Rural development initiatives represent one part of the County's entrepreneurial economy. Additional references to small businesses is included in ECD4.1.1: Entrepreneurial Economy (pg. 28).

Economic Development is normally associated with industrial and commercial enterprise efforts, but the basic approach can also be applied to the agricultural and forest industries. Such efforts can include agritourism and eco-tourism, development and promotion of alternative and/or local markets and the development of alternative products or production techniques. Rural Economic Development Initiatives are a part of this report because they are voluntary and address the fundamental benefit of making open space land uses more economically competitive and intensive in order to achieve long term conservation.

ENV 2.1.8 Use Value Assessment: Use Value Assessment is a popular program in Virginia that has been used by many localities since the 1970s. Use Value Assessment is a system by which property taxes are based on the current use of the land, rather than on its potential market value as developable (residential, commercial, or industrial) land. This change in tax rate often provides farmers with enough additional income to continue farming, when they otherwise would have to sell their land to pay their taxes. It is also known as Land Use Assessment.

ENV 2.1.9 Urban Growth Boundaries [Urban and Village Expansion Areas]: Urban Growth Boundary consists of invisible lines drafted by planners to signify areas beyond which future growth in the city should not pass. The boundary is often drawn outside of existing political boundaries, such as city limits. Land within the boundaries is designated as "urbanizable land."

**ENV 2.1.10 Public Land Acquisition Program:** Public Land Acquisition Program is a fund created by a county for the express purpose of purchasing public open space for use as parks, or recreational corridors.

**ENV 2.1.11 Educational and Informational Distribution Program:** To give the residents of Montgomery County access to open space preservation information from the county, state and national level, which they can use to protect their land from development. One of the fundamental problems with open space protection is that most landowners are

unaware of the tools available for the protection of their land, and those that have had some exposure to these tools only have a partial understanding of how they work. This strategy is essential for the success of open space preservation, because until landowners are more familiar with the available tools, the County will continue to meet resistance from many of the County's residents. (23)

ENV 2.1.12 Conservation Easements and Virginia Scenic Byways: Virginia Byways are existing roads with significant aesthetic and cultural values, leading to or lying within an area of historical, natural or recreational significance. Virginia Byways designate corridors of regional significance. Accordingly, the County actively supports the retention of agricultural, forest, and open space uses along Virginia Byways. (24)

**Cross References and Notes:** 

<sup>23.</sup> Overall approaches to public information is addressed in PNG 2.2: Informing the Public (pg. 19).

<sup>24.</sup> Scenic Byways is also referenced in TRN 2.6 (pg. 58)

**ENV 3.0 Streams, Rivers, and Surface Waters:** The county is committed to working to maintain and to enhance the quality of its many streams and rivers for human health, habitat vitality, and safe recreational opportunities. Furthermore, the county is committed to ensuring that the problems such as flooding, erosion, and sedimentation will be minimized. (25)

**ENV 3.1 Agricultural Program and Policy:** Encourage farmers and landowners to work with existing government agencies, such as Skyline Soil and Water District, and programs and to learn about and use Best Management Practices (BMP's) to protect surface water qualities.

**ENV 3.1.1 Floodplain Ordinance:** Enhance the floodplain ordinance to require that riparian buffers remain undisturbed at a specified distance from the edge of all streams with a designated floodplain (e.g. minimum of 100 feet). (26)

## **ENV 3.1.2 Water Quality Protection Ordinance:**

Develop a water quality protection ordinance that includes provisions to preserve the natural forested vegetation along the corridors of all perennial streams and rivers.

## **ENV 3.1.3 Environmental Quality Corridors:**

Develop an Environmental Quality Corridor (or Water Quality Corridor or Creek Overlay District like Blacksburg) that requires the preservation of riparian buffers as a foundational component.

**ENV 3.1.4 Agricultural Best Management Practices:** 

Work with farmers to locate and obtain grant funding from resources such as the Virginia Agricultural Best Management Practices Cost Share or the USDA's Environmental Quality Incentives Program. These incentives encourage the use of Best Management Practices (BMPs) including riparian buffers, fencing of livestock, and providing alternative watering sources for livestock.

## **Cross References and Notes:**

25. Floodplains are addressed in ENV 4.0: Floodplains (pg. 38). Erosion and Sediment Control is addressed in ENV 7.0: Stormwater and Erosion Control (pg. 43) and UTL 4.0 Stormwater Management (pg. 64).

26. Riparian buffer easements are addressed in ENV 7.3.3 Tax Incentives for Riparian Buffer Easements (pg. 44). Riparian areas are addressed in ENV 3.2.7 Protection of Riparian Features (pg. 37).

## ENV 3.1.5 Environmental Education and Outreach: Develop an educational and outreach program tailored to farming practices near impaired waters to assist

to farming practices near impaired waters to assist farmers in sharing information and learning about alternative techniques.

## **ENV 3.1.6 Agricultural and Forestal Districts:**

Strengthen the quality of the Agricultural and Forestal District (AFD) management plan review to ensure that water quality goals are an essential element on properties in the AFD. Enlist the assistance of Extension Service staff, the Skyline Soil and Water Conservation District staff, and other advisory bodies in clarifying the review process.

ENV 3.1.7 Skyline Soil and Water Conservation District: Work with the Skyline Soil and Water Conservation District to identify county needs and participate in district programs. In order to facilitate the programs of the District and to demonstrate commitment to the partnership, the County should increase funding resources (currently \$4000) to the District equivalent to at least half of the amount provided by the highest paying county (currently Floyd County at \$11,455) in the District.

**ENV 3.1.8 Extension Service:** Work with the county Extension Service to disseminate information in newsletters to farmers and to organize educational sessions on maintaining water quality while enhancing agricultural practices.

**ENV 3.2 Vegetation and Soil**: Develop initiatives and ordinances that maintain and enhance of the integrity of surface water bodies during development and redevelopment projects by minimizing clearing of vegetation and disturbance of soils.

**ENV 3.2.1 Impervious Surface:** Amend zoning ordinance to reduce the percent of coverage from buildings, parking, and other impervious surfaces.

**ENV 3.2.2 Vegetation:** Increase incentives for maintaining existing vegetation during development.

**ENV 3.2.3 Compliance Incentives:** Adjust the fee schedule to allow for a reduction in fees for quality

development proposals that comply with the purposes of this objective.

ENV 3.2.4 Maintaining Water Quality: Establish standards for water quality improvement during the development or redevelopment of properties located within Urban Expansion Areas, and other areas targeted for development and redevelopment, through replacement of improperly maintained BMPs, replacement of inefficient sanitary sewer lines or failing septic systems, and, where appropriate, revegetation along streams.

**ENV 3.2.5 Commercial and Industrial Runoff:** Locate away from the County's water bodies those nonresidential activities that use, store, or manufacture significant quantities of toxic substances.

## **ENV 3.2.6 Preservation of Natural Landscapes:**

Develop general design evaluation guidelines, criteria, and techniques that promote the preservation of natural landscapes and apply them in the evaluation of rezoning and/or special use permit applications.

ENV 3.2.7 Protection of Riparian Features: Where appropriate, require rezoning and special use permit applicants to describe in general detail the natural character of significant creeks, rivers, lakes, and ponds (as characterized on United States Geological Survey Maps) located on the property, as well as the 100-year floodplain. Require applicants for such rezonings and/or special use permits to explain how the significant surface water bodies and related shorelines to be retained upon completion of the project will be protected during construction.

**ENV 3.2.8 Shrink/Swell Soils:** Amend applicable County Ordinances to require a shrink/swell soils study for development and construction. (27)

## **Cross References and Notes:**

**ENV 3.3 Individual Septic System** Work to reduce septic leaching problems by encouraging proper locating, maintenance, and testing of septic tank systems.

**ENV 3.4 Public Awareness:** Address water resource concerns in the County by developing networking opportunities for citizen groups and school programs to share information and pool resources, and enlist their aid in the Virginia Department of Environmental Quality's stream water quality monitoring programs.

**ENV 3.4.1 Grants:** Assist organizations in locating and obtaining grant funding for various projects for the County's streams and rivers.

**ENV 3.4.2 Technical Data/ Resources for Identifying Problem Areas:** Provide technical data and resources where available to allow citizen groups to identify current and potential future problems or concerns.

**ENV 3.4.3 Citizen Involvement:** Enlist the aid of citizen groups in community clean up efforts such as Adopt-A-Highway, Adopt-A-Stream, Broomin' and Bloomin', Save Our Streams, etc.

**ENV 3.4.4 Public Information:** Activities, Meetings, and Events: Maintain a list of contact information for local citizen groups involved in water quality issues, and work with citizen groups to communicate activities, meetings, and other events to a central office so that information can be disseminated to other citizen group leaders.

ENV 3.4.5 Citizen Water Quality Monitoring: Identify groups that have a significant interest in surface water in the County including, but not limited to, angling groups, outdoor recreation groups and/or companies, watershed or water quality protection organizations, science and ecology classes in public schools, etc. Hold the training sessions and obtain commitments from volunteers to perform regular monitoring of streams that are of particular interest to them.

**ENV 3.4.6 Save Our Streams:** Work with the Virginia Natural History Museum, Fish and Wildlife Service, Virginia Tech departments, and/or DEQ officials to

<sup>27.</sup> Virginia Uniform Statewide Building Code (2000 Edition) Section R401.4 Soil Tests (effective October 1, 2003)

continue implementation of the Save Our Streams Program, including develop training sessions and monitoring kits for interested county volunteer monitors and schools.

**ENV 3.5 Government Cooperation:** Work with the Towns of Blacksburg and Christiansburg, the City of Radford, and neighboring counties to ensure consistency and compatibility of goals, objectives, and strategies in the water quality planning process.

**ENV 3.5.1 Regional Roundtable:** Enlist the aid of the New River Valley Planning District Commission, Roanoke Valley Regional Commission, and the Roanoke River Corridor Committee to develop regional roundtables to plan for and to address water quality concerns.

**ENV 4.0 Floodplains:** Montgomery County seeks to maintain and enhance the integrity of its floodplains through improved public education, public safety, governmental cooperation, ordinances, and data.

**ENV 4.1 Partnership and Regional Cooperation:** Continue to build partnerships with public agencies to preserve and enhance floodplains in the County.

**ENV 4.1.1 Regional Cooperation: New River Valley:** Enhance collaboration with the New River Valley Planning District Commission through regular participation in regional meetings.

**ENV 4.1.2 Regional Cooperation: Roanoke & James River Watersheds:** Develop working relationship with local governments in the Roanoke Valley to preserve and protect floodplains within the headwaters of the Roanoke and James Rivers.

**ENV 4.1.3 Public Education:** Work to educate property owners, builders, lenders, and others of the negative effects of building within the floodplain. Education programs should be developed in collaboration with the relevant agencies listed above.

**ENV 4.2 Floodplain Program and Policy:** Develop programs/policies/ordinances that will encourage developers and builders to avoid developing within or directly adjacent to the floodplain.

ENV 4.2.1 Flood Damage Prevention Overlay District: Enhance the Flood Damage Prevention Overlay District of the zoning ordinance to require that riparian buffers remain undisturbed at a specified distance from the edge of all streams within a designated floodplain (e.g., minimum of 100 feet) as well as to encourage greater buffers through incentives such as tax relief or land use valuation.

**ENV 4.2.2 Code Enforcement:** Continue to enforce applicable county, state and federal regulations within the designated 100-year floodplain.

**ENV 4.3 Public Safety**: Reduce and/or eliminate the long-term risks to human life and property from flooding and its effects through the use of timely data. (28)

**ENV 4.3.1 Regional & Local Hazard Mitigation Plan:** Continue to work with the New River Valley Planning District Commission to develop a local hazard mitigation plan.

ENV 4.3.2 Flood Mitigation Measures: Following completion of the local hazard mitigation plan (which may include prioritized areas), apply for Flood Mitigation Assistance Program funds (dependent on successful completion of strategy 2) to acquire or relocate structures from floodplain areas and to construct certain types of minor and localized flood control projects. Hazard Mitigation Grant Program funds may be sought following a hazard declaration and assistance may be sought through the New River Valley Planning District Commission.

Cross References and Notes.

28 Hazard Mitigation and the New River Valley Hazard Mitigation Plan are also addressed in SFY 1.1.4: NRV Hazard Mitigation Plan (pg. 50) and UTL 4.2: Regional Hazard Mitigation Plan (pg. 64). A copy of the NRV Hazard Mitigation Plan is available from the New River Valley Planning District Commission.

**ENV 5.0 Groundwater:** Montgomery County is committed to maintaining an abundant and clean supply of subsurface water resources.

ENV 5.1 Septic System and Well Water Testing: Work with the New River Valley (NRV) Health Department to develop a process for locating and testing well water quality and septic systems on a regular basis to ensure that groundwater quality is consistently monitored and that contamination risks are minimized. (29)

ENV 5.1.1 Tracking Septic System Maintenance:

Develop an official process in conjunction with the NRV Health Department and certified private septic system maintenance firms to track septic system maintenance throughout the County. The process could include the following components but may include others deemed appropriate by the partnership participants: Private firms should report the name, address, date of pumping, overall quality of the septic system, and other information deemed necessary by the participating parties. The Health Department should maintain the records provided by the private firms in the upcoming statewide database system for ease of reference and use. Once the database is established, the health department with other agencies can identify septic systems that have not been pumped and send reminders to landowners (much like the private firms do now for past customers).

ENV 5.1.2 Septic System/ Well Testing with Real Estate Transactions: Implement a county process with the NRV Health Department, which would require that well testing and/or septic system testing reports accompany every real estate transaction involving septic systems or well water resources.

ENV 5.1.3 Monitoring of Alterative Onsite Wastewater Treatment Systems: Assist the NRV Health Department in identifying engineering firms that install, monitor, and maintain alternative onsite wastewater treatment systems in the County. Work with the engineering firms to participate in the septic system

#### **Cross References and Notes**

29. Issues surrounding septic systems are also addressed in UTL 1.4: Individual Systems (pg. 62).

maintenance partnership to share information about the location and condition of the alternative systems. Since these systems are regularly monitored, the necessary information should be readily available.

**ENV 5.2 Education:** Educate landowners on various factors to consider in choosing and maintaining onsite wastewater treatment systems, and encourage connections to public sewer systems where possible.

**ENV 5.2.1 Septic System Maintenance:** Identify septic tank owners who have not regularly maintained their septic systems through the process outlined in objective one. Beyond sending postcard reminders, disseminate educational pamphlets and booklets developed by the Virginia Water Resources Center to educate reluctant septic tank owners of the benefits of regular maintenance procedures.

ENV 5.2.2 Alternative Wastewater Processing Systems: Work with the NRV Health Department to promote alternative wastewater processing systems that treat effluent before discharging the waste into surrounding soils. These systems are particularly suited to Montgomery County given the incompatibility of county soils with traditional systems. These systems should be promoted in new developments and especially for homes that have experienced a septic system failure.

**ENV 5.3 Groundwater Quality Protection Programs and Policies:** Develop and/or update ordinances, policies, and programs that ensure responsible land use in karst terrain for the protection of groundwater quality.

**ENV 5.3.1 Septic System Maintenance:** Update the process for applying for Building Permits to require that a proof of septic system maintenance accompany the application.

**ENV 5.3.2 Drainfield Requirements:** Review the zoning ordinance to ensure that lots in areas that require septic tank waste disposal systems are large enough to accommodate two drain fields one of which can be used for repair drainage fields when the first field fails.

**ENV 5.3.3 Connection to Public Sewer:** In cases where public sewer is available, require hook-ups to the system for new units, even where the zoning ordinance would otherwise allow septic systems. Where existing septic systems fail and sewer systems are accessible, require hook-ups to the system instead of a septic system repair job.

**ENV 5.4 Wellhead Protection:** Complete all twelve steps for the wellhead protection process as identified by the Virginia Groundwater Protection Steering Committee within 5 years of the adoption of this plan.

ENV 5.4.1 Well-Head Protection Program: Implement a Well-Head Protection Program, including: 1) Establish a Wellhead Protection Advisory Committee and appoint a project leader; 2) Determine the appropriate areas to include in wellhead protection areas, based on the 1993 Wellhead Protection Program report for Montgomery County; and 3) Identify management strategies to mitigate the impact of land uses within the protection area on the water source. (Consult Montgomery County's 1993 Proposed Wellhead Protection Program and the Virginia Ground Water Protection Steering Committee's 1998 Implementing Wellhead Protection publication.)

**ENV 5.4.2 Public Involvement:** Encourage public involvement in the development and implementation of the wellhead protection program by including interested citizens on the advisory committee and holding public information and comment sessions in communities that might benefit from a wellhead protection program.

**ENV 5.5 Conservation:** Encourage landowners to conserve water and consider the impacts of their water use on others in their region.

**ENV 5.5.1 Public Information:** Develop and disseminate educational materials to the public on water conservation measures for both private and business uses.

**ENV 5.5.2 Best Management Practices.** Strategy: Work with local farmers to identify best management practices for crop watering during drought years. Enlist

the aid of area universities, the Farm Bureau, and other interested parties in developing educational materials and disseminating the information.

ENV 5.5.3 Wastewater/water Recycling and Reclamation Programs: Investigate water recycling/reclamation practices and advocate such practices where applicable in the County.

**ENV 5.6 Development:** Minimize the coverage of impervious surfaces to allow rain percolation through strategies such as low-impact development and stormwater management planning and concentrate new development in areas where public water supplies and sewer systems exist or are planned.

**ENV 5.6.1 Groundwater Identification:** Identify areas of the County where groundwater resources are abundant and encourage rural development and redevelopment in proximity of these water resources. Consider these areas for designation as expansion areas and/or urban growth areas.

**ENV 5.6.2** Adequate Facilities Policy: Develop an adequate facilities policy for the County modeled after the Route 177 Corridor Overlay District to ensure adequate levels of service for public water supplies.

**ENV 5.6.3 Cooperative Urban/Suburban Planning:** Coordinate planning efforts with the towns of Blacksburg and Christiansburg and the City of Radford to encourage infill development in and around the towns and city.

**ENV 5.7 Monitoring:** Implement a monitoring program for well systems in areas that may be affected by mine drainage (notably, near Brush Mountain and Price Mountain) or other areas that are at a particular risk of contamination to ensure public health and safety.

**ENV 5.7.1 Water Quality:** Work with the NRV Department of Health, area universities, citizen groups or other appropriate resources on developing a regular monitoring schedule to keep track of water quality concerns in wells near closed mines.

**ENV 5.7.2 Well Testing:** If contaminated well systems are identified due to monitoring efforts in the County, work with the NRV Department of Health, area universities, and/or citizen groups or other appropriate resources to test wells in the surrounding area to ensure that other nearby wells are checked for health risks.

**ENV 6.0 Karst Goal:** Montgomery County is committed to managing karst terrain in such a manner so as to: 1) protect groundwater and surface water resources from contamination; 2) reduce potential for property damage resulting from subsidence, or other earth movement, and sinkhole flooding; 3) protect the health, safety, and welfare of the public; and 4) protect the habitat of rare, threatened, and endangered animal species and ecosystems that depend on the environmental quality of Montgomery County's karst terrain.

**ENV 6.1 Planning:** Identify and map bedrock geology, karst terrain, and sensitive karst terrain at a scale appropriate for environmental planning. Incorporate these maps into the planning tools used by the county.

**ENV 6.2 Program and Policy:** Adopt policies and procedures that preserve, protect, and restore significant karst features in Montgomery County.

**ENV 6.2.1 Karst Ordinance:** Adopt a Karst or Carbonate Area Ordinance that includes:

- a. Programs, policies, and/or amendments to established ordinances that will preserve and restore Karst Feature Buffers around karst terrain recharge features (e.g., sinkholes, caves, sinking creeks).
- b. Programs, policies, and/or amendments to established ordinances that will establish substantial (one thousand [1000] feet) minimum distances from which underground storage tanks and hazardous waste must be kept from karst terrain recharge features (e.g., sinkholes, caves, sinking creeks).
- c. Programs, policies, and/or amendments to established ordinances that prohibit trash dumps in karst terrain recharge features, especially, but not limited to sinkholes.
- d. Programs, policies, and/or amendments to established ordinances that substantially increase the minimum septic system standards set by the New River Valley Department of Health to ensure greater groundwater protection in karst areas.

**ENV 6.3 Public Awareness:** Promote public awareness of karst related issues by providing public information on karst geology and water quality.

**ENV 6.4 Conservation:** Encourage and facilitate the application of permanent open space land conservation tools to protect areas of the County identified as sensitive karst. Potential open space tools include, but are not limited to, agricultural-forestal districts conservation easements, large lot zoning, sliding scale zoning, rural cluster zoning, public land acquisition, and the purchase of development rights. Each of these tools is detailed in the open space section of this plan.

**ENV 6.5 Stormwater Management:** Maintain the predevelopment drainage patterns (including the quantity and timing) of runoff draining into karst terrain features.

ENV 6.5.1 Karst Feature Overlay Districts: Amend the Montgomery County Subdivision and Zoning ordinances to include a Karst Feature Overlay District (or Limestone Overlay District). Development within this district should maintain pre-development drainage patterns on the site and the quantity and quality of stormwater runoff entering karst terrain features on, and adjacent to, the site. In addition, the construction of any structure in an area determined by a Geophysical Study to be susceptible to subsidence that would be harmful to the public safety or the safety of future residents should be prohibited if the potential harm cannot be mitigated.

ENV 6.5.2 Low Impact Development: Amend the Montgomery County Subdivision and Zoning ordinances to allow and strongly encourage the use of Low Impact Development (LID) techniques. It will be necessary to carefully screen the LID tools to ensure that those techniques used in Montgomery County are appropriate for use in karst terrain (please refer to the Karst-LID Workgroup study being conducted by the Northern Shenandoah Planning District Commission, contact details in Appendix II).

**ENV 6.5.3 Erosion and Sediment Control:** Amend the County Erosion and Sediment Control ordinance to protect karst recharge features and encourage land developers to implement additional Best Management

Practices (BMPs) to limit the clogging of karst recharge features by sediment.

ENV 6.6 Conservation Best Management Practices: Encourage the use of both agricultural and silvicultural BMPs and cost share programs in karst areas, especially the Conservation Reserve Enhancement Program.

ENV 6.6.1 Karst and Ground Water Best Management Practices: Work with the Skyline Soil and Water Conservation District, the Natural Resources Conservation Service, the Farm Service Agency and the Virginia Department of Forestry to help improve voluntary implementation of karst and groundwater protection BMPs.

**ENV 6.6.2 Conservation Reserve Enhancement Program:** Strongly encourage landowner participation in the Conservation Reserve Enhancement Program and work with the sponsoring agencies to achieve as a high a participation rate as possible.

**ENV 6.7 Governmental Cooperation:** Work with the towns of Blacksburg and Christiansburg, the City of Radford, and the neighboring counties to provide a regional approach to land use management decision-making in karst terrains and karst impacted groundwater and surface water resources.

ENV 6.7.1 Regional Karst, Groundwater, and Surface Water Roundtables: Enlist the aid of the NRV Planning District Commission and Roanoke Valley-Alleghany Regional Commission to develop regional roundtables to plan for and address karst terrain and related groundwater and surface water issues.

**ENV 6.8 Water Quality**: Gauge and establish baseline water quality data at all major springs.

**ENV 6.8.1 Hydrological Studies:** Perform hydro studies (dye trace) to delineate recharge areas for major (>0.5 MGD) springs and water supply wells serving > 10 residences or industries.

**ENV 7.0 Stormwater & Erosion Control:** County is committed to managing stormwater and erosion in order to protect surface water quality and aquatic habitat vitality, to guard against the loss of landmass and to maintain and enhance human health and safety. (30)

ENV 7.1 Stormwater and Erosion Management Program. Develop a proactive stormwater management program designed to address stormwater runoff in watersheds and villages.

ENV 7.1.1 Village Planning and Stormwater Management. Work with the County Engineer to develop a stormwater management plans in tandem with each of the six village plans (Belview, Elliston-Lafayette, Plum Creek, Prices Fork, Riner, and Shawsville).

**ENV 7.1.2 Comprehensive Watershed Management Study.** Conduct a local comprehensive watershed management study for Montgomery County and revise ordinances to address results.

**ENV 7.1.3 Stormwater Management Database.** Create a database of projects, integrated with the County's GIS, that would track projects and activities, including timber operations, which contribute to runoff and erosion.

## **ENV 7.1.4 Stormwater Management Ordinance.**

Develop, adopt, and implement a stormwater management ordinance, in line with Phase II of the Virginia Pollutant Discharge Elimination Program (VPDES), including 1) provisions for water quality assessment in site designs and reviews; 2) provisions for strengthening current stormwater management and erosion control requirements; and 3) and provisions which reflect new Virginia Storm Water Pollution Prevention Plan Requirements (SWPPP) which went into effect July 1, 2004.

## **Cross References and Notes:**

30. Stormwater Management is also addressed in UTL 4.0: Stormwater Management (pg. 64). Stormwater management plans for Villages are addressed in PLU1.7.5e Stormwater Management Plans (pg. 11).

ENV 7.1.5 Stormwater and Erosion Best Management Practices. Develop a Best Management Practices approach to water management for development and redevelopment, including the use of Low Impact Development (LID) techniques (clustering, limiting impervious surfaces, use of innovative pavement, etc.).

**ENV 7.1.6 Public Awareness and Education.** Develop an erosion/ stormwater management public awareness program.

**ENV 7.2 Stormwater Authority.** Examine the feasibility of developing of a joint Stormwater Utility (Stormwater Authority), including fee structure, for Montgomery County, Blacksburg, Christiansburg, and Radford.

**ENV 7.3. Compliance.** Investigate alternative means of encouraging compliance with erosion and sedimentation control.

**ENV 7.3.1 Enhanced Inspections.** Utilize building inspectors to enhance compliance with the Erosion and Sedimentation Ordinance. Additional building inspector

man-hours required for erosion and sediment control inspection may be funded through a stormwater utility fee.

ENV 7.3.2 Pre-Construction Notices. Implement an on-site erosion control pre-construction notice to encourage public enforcement of the Erosion and Sedimentation Ordinance. This notice is intended to help ensure that erosion and sediment control measures are properly installed, by including a list of permit conditions and plan requirements prior to construction. Additionally, the public will be put on notice that such construction has been permitted while construction sites without such a notice have not.

## **ENV 7.3.3 Tax Incentives for Riparian Buffer**

**Easements.** Provide a tax exemption for land designated as a riparian buffer, if held under a perpetual easement. Riparian buffers protect streams and shorelines from erosion and prevent sedimentation of waterways. Such an exemption is provided for under Article 5, Chapter 36 of Title 58.1 of the Code of Virginia.

## Health and Human Services: Goals

**HHS 1.0 Sustainable and Livable Communities:** Promote development patterns in Montgomery County which enhance the diversity; recognize the interrelatedness of land use, economic development, quality of live, social, health, and environmental issues; and enable the development of a livable and sustainable community for all citizens. (1)

**HHS 2.0 Quality of Life:** Promote a fair and equitable approach to quality of life issues, including housing, jobs, transportation, education, and community amenities. (2)

> HHS 2.1 Affordable Housing. Montgomery County should promote affordable housing and livable neighborhoods and communities. (3)

**HHS 2.2 Economic Development.** Establish and support an economic development policy that: 1) provides a living wage; 2) encourages diversity and accessibility; 3) increases access to job training and retraining opportunities; and 4) expands opportunities for job advancement and improved quality of life for all citizens.

HHS 2.3 Transportation. Provide increased access to and variety of public transportation opportunities for all citizens,

**Cross References and Notes:** 

1. Sustainable and livable communities is also addressed in HSG 1.0: Livable Neighborhoods (pg. 48) and HSG 1.3: Safe Neighborhoods (pg. 49).

with a special emphasis on job-related transportation for the disabled and for lower income individuals and families. (4)

HHS 2.4 Technical and Vocational Education Facilities and **Programs.** Expand technical and job related training through a partnership with Virginia Tech, Radford University, New River Community College, and the Montgomery County Public Schools, as well as other public and private vocational and job training programs in Montgomery County through the reuse of abandoned or decommissioned educational facilities and funded through public/ private partnerships. (5)

**HHS 2.5 Community Facilities.** Equitably distribute new cultural and recreational facilities throughout Montgomery County in order to provide greater access to social, cultural, and recreational opportunities to all county residents.

<sup>2.</sup> While much of this plan deals with improving citizens' quality of life, specific references are contained in ECD 1.0: Economic Development, Land Use, and Quality of Life (pg. 25).

<sup>3.</sup> The work group promoted the following affordable housing strategies: 1) mixed income developments through the implementation of a 25% affordable housing requirement for all new developments such that the units will be interspersed throughout the development rather than encouraging ghettoization (clustering of affordable units in one area); 2) development of smaller housing stock (starter homes) of 1,000-1,500 square feet on smaller lots by providing developers with density bonuses; 3) accessory dwelling development in higher density areas in order to provide greater access to and dispersion of rental units; 4) provision of individual eldercare opportunities for families by allowing accessory dwellings on all lots in the county used for residential purposes; 5) mixed-use developments which allow residential, commercial, institutional, and/or industrial uses within a single development; 6) encourage increased development and density in areas where public utilities and services area available; and 7) establish and enforce a property maintenance in order to address housing standards in Montgomery County.

<sup>4.</sup> Public transportation is addressed in TRN 3.0 Mass Transit (pg. 58) and TRN 4.0 Alternative Transportation (pg. 59).

<sup>5.</sup> Education and Technical/Vocational Training are addressed in ECD 2.0: Workforce Development (pg. 26) and EDU 2.1 Technical and Vocational Education (pg. 30). 6. The location of community facilities are addressed in PLU 1.6 Village Expansion Areas (pg. 7); PLU 1.7: Villages (pg. 9); and PLU 1.8: Urban Expansion Areas (pg. 45) as well as the chapters covering Cultural Resources, Educational Resources, and Recreational Resources.

**HHS 3.0 Regional Cooperation and Collaboration:** Promote regional, local, and intergovernmental cooperation in the development and distribution of health and human services, with a special emphasis on public/private cooperation and collaborative efforts. (7)

**HHS 3.1 Interjurisdictional Cooperation:** Work with the NRV Planning District Commission to establish a interjurisdictional task force to assess and monitor health and human service related issues both in Montgomery County and in the New River Valley.

HHS 3.1.1 County Office on Cooperation: Establish an office that would provide: 1) linkages between public and nonprofit agencies and between jurisdictions; 2) grantwriting resources for public/nonprofit partnerships; 3) generation of public information for public and nonprofit agencies.

**HHS 1.3 Public Information:** To facilitate the distribution of public information concerning health and humans service related issues, services, and facilities.

**HHS 1.3.1 County Office on Information.** Work with the Montgomery County Public Information Office to develop appropriate and effective approaches to the development and distribution of social and health service related information

HHS 1.3.2 Geographic Information System. Create appropriate geographic information system layers which track affordable housing, distribution of social and health services, demographic information (income, commute time, household size, etc. by block, block group, and voting district), and emergency management information.

HHS 4.0 Medical and Mental Health: To promote and, when possible, help facilitate the equitable distribution of medical and mental health services and facilities, including hospitals, clinics, special care facilities, and fire and rescue services throughout the county, with a special emphasis on underserved populations or areas of the county. (8)

**HHS 4.1 Health Care Facilities**. Identify and designate areas appropriate and adequate for the location of long- and short-term medical and mental health care facilities, with a special emphasis on the siting of long term eldercare facilities.

**HHS 4.2 Emergency Care Facilities.** In conjunction with the Health Department, the Free Clinic, and other public and nonprofit agencies, develop and site an emergency health care clinic in underserved portions of the County, most notably in the Shawsville-Elliston-Lafayette area.

HHS 4.3 Emergency Response Facilities and Staff. Continue to support the development of adequate fire and rescue facilities and ongoing training of fire, rescue, and law enforcement staff throughout Montgomery County.

## **Cross References and Notes:**

7. Montgomery County recognizes the grants are often more successful when they incorporate a regional approach and have the support of local governments and government agencies. In addition, governments can offer certain services, such as GIS, that may be beyond the scope, ability, or budget of social, human, health, and mental health organizations.

## **Cross References and Notes:**

8. The Community-Based Schools and Public Facilities initiative offers one possible solution to the siting of health and human service facilities in the County. Specific discussion of the program is included in PNG 3.1.4 Community Based Schools and Public Facilities Initiative (pg. 20) and EDU 1.2: Community Based Schools and Public Facilities (pg. 29). Public safety facilities are addressed in SFY 1.3: Future Capital Facilities (pg. 50).

**HHS 5.0 Human Services and Facilities:** To promote and, when possible, help facilitate the development and equitable distribution of elder, family, and youth services and facilities throughout the county, with a special emphasis underserved population or areas of the county. (9)

HHS 5.1 Human Service Facilities. Identify and designate areas appropriate and adequate for the location of human service facilities, including group homes; emergency care facilities, such as shelters; transitional care and housing facilities, and rehabilitation facilities.

**HHS 5.2 Elder Care Facilities.** Identify and designate areas appropriate and adequate for the location of elder care facilities, including retirement communities, long-term care facilities,

Cross References and Notes.

9. See footnote # 8 (pg. 46).

adult daycare facilities, and other special use facilities specific to the needs of the senior population.

HHS 5.3 Child and Youth Care Facilities. Identify and designate areas appropriate and adequate for the location of child and youth care facilities, including child care centers, after school centers, child and youth group homes, and other special use facilities specific to the needs of children, youth, and families.

HHS 5.4 Location. Explore the design and implementation of a "Trust Program" which would allow landowners, in specific areas of the county, to gift their property to health and human service organization if they so choose in exchange for tax relief.

**HHS 5.5 Adequate Funding:** To promote adequate public and private funding for public health and human services and facilities.

## Housing: Goals

**HSG 1.0 Livable Neighborhoods**: Promote affordable, safe, livable neighborhoods for all residents. (1)

**HSG 1.1 Affordable Housing**. Promote affordable, quality housing for all income levels. (2)

HSG 1.1.1 Regional Housing Study. Work with the New River Valley Planning District Commission and member jurisdictions, including Virginia Tech and Radford Universities to do a comprehensive analysis of current housing conditions, housing affordability, and the impact of a large student presence on the availability of affordable housing in the region, and determine the best approaches to insuring the availability of quality housing across income levels.

## **HSG 1.1.2** Adequate Zoning for Future Growth.

Conduct a zoning study to determine residential land use requirements for the next 20-25 years, in five year increments, including an evaluation of product type (single family attached and detached, multi-family, and manufactured; own/rent, price/rent categories) and estimated land required for each type of housing; and rezone sufficient lands, in appropriate areas (those areas served by public water and sewer) to accommodate future growth.

**HSG 1.1.3 Affordable Housing Incentives**. Provide incentives for affordable housing development. (3)

#### **Cross References and Notes:**

1. Livability, sustainability, and quality of life go hand-in-hand. While the plan implicitly addresses all three, specific references can be found in PNG 4.1.1: Livable Communities (pg. 20); PLU 3.0 Community Design (pg. 16); ECD 1.0: Economic Development, Land Use, and Quality of Life (pg. 25); HHS 1.0: Livable Communities (pg. 45); HHS 2.0: Quality of Life (pg. 45), and HSG 1.3: Safe Neighborhoods (pg. 49).

2. The Affordable Housing portion of the plan was based, in part, on recommendations from Wu Li and Dr. T. Koebel of Virginia Tech's Housing Institute.

3. 1) Reducing pre-development approval times; 2) Reducing the impact of government regulations on building cycle time; 3) Facilitating the development of Low Income Housing Tax Credit (LIHTC) properties with access to public water and sewer; 4) Providing density bonuses for developments that include affordable units; and 5) Establishing an ad-hoc advisory committee of for-profit and non-profit developers to advise the county on the impediments they face in developing affordable housing.

**HSG 1.1.4 Public/Private Partnerships.** Promote the development of public private partnerships to address the needs of moderate, low, and very low income residents. (4)

**HSG 1.1.5 Public Information.** Provide public information on programs that encourage the development of housing for moderate, low, and very low income individuals and families and programs that would promote affordable homeownership, including: 1) Below market interest programs; and 2) Homeownership counselling, credit counseling, and savings programs (Individual Development Accounts) (5)

**HSG 1.1.6 Very Low Income and Transitional Housing Needs:** Conduct a study of housing for very low income and transitional housing in Montgomery County and the Metropolitan Statistical Area

**HSG 1.1.7 Grants Office**. Promote the development of a regional grants office, through the New River Valley Planning District Commission, to develop joint-sponsored grants and public/private partnerships to address issues of affordable housing, housing for the very low income, and transitional housing in the region. (6)

## **Cross References and Notes:**

4. In 1999, the U.S. Department of Housing and Urban Development (HUD) established new definitions of low and very low income. According to HUD, low income is defined as 80% of the area's median family income, and very low income is 50% of the area's median family income." In 2000, the US Census Bureau established the County's median family income at \$47,239. Given this, the low income designation would start at \$37,791 and very low income would begin at \$23,619. The HUD definitions are used to establish base eligibility for public housing and Section 8 housing programs. It should be noted, however, that the percentage of median varies based on the size of family and eligibility may be affected by local housing prices and other considerations.

5. General approaches to public information are addressed in PNG 2.2: Informing the Public (pg. 19) and CRS 2.1.3 Libraries: Public Information: Technology (pg. 23).

6. The need for a grants office is also addressed in ENV 3.4.1 Streams and Rivers: Grants (pg. 36) and HHS 3.1.1 County Office on Cooperation (pg. 46).

## **HSG 1.2 Manufactured Housing and Housing Parks**:

Actively encourage the development and maintenance of livable manufactured housing parks inorder to facilitate a community ethos.

**HSG 1.2.1 Manufactured Housing Park Standards.** Develop prototype standards for improving site design, including landscaping and buffering standards, amenities standards, and public facility standards.

**HSG 1.2.2 Maintenance Standards.** Develop maintenance standards for mobile home parks and HUD-code housing units.

**HSG 1.2.3 Recycling/Salvage Program.** Develop a recycling/salvage program for old, obsolete manufactured housing that would encourage replacing occupied, obsolete mobile homes and discourage abandonment and neglect.

**HSG 1.3 Safe and Livable Neighborhoods.** Promote the use of safe and livable neighborhood designs in residential development. (7)

**HSG 1.3.1 Mixed Use Neighborhoods**. Encourage the development of planned, mixed use, pedestrian and transit friendly neighborhoods, which would combine office, commercial, residential, recreational uses into a single development.

**HSG 1.3.2 Public Information:** Provide residents and developers information on "safe neighborhood," transitoriented, and traditional neighborhood (TND) design and development.

HSG 1.3.3 Safe Neighborhoods and Transportation. Encourage intra- and inter-connectivity of roads, bikeways, and walkways in new residential developments in order to promote increased sense of community and safety, while decreasing traffic concentration.

<sup>7.</sup> The concept of safe and livable neighborhoods is implicitly embedded in the land use policies associated with Villages (PLU 1.7, pg. 9), Village Expansion Areas (PLU 1.6, pg. 7), and Urban Expansion Areas (PLU 1.8, pg. 11), as well as the Community Design policies (PLU 3.0, pg 16; see, also, footnote # 1 (pg 48) for other references.

## Public Safety: Goals

**SFY 1.0 Public Safety Goal**: Promote and facilitate the provision of superior law enforcement and emergency services (fire and rescue) in order to insure that people have a safe and secure community in which to live, work and raise their families.

**SFY 1.1 Management Structure**: Establish a single clear management structure for planning and policy setting while striving to achieve consensus among fire, EMS and other health and safety related constituency groups in formulating public policy, procedures and protocols. (1)

**SFY 1.1.1 Advisory Board**: The "Fire and Rescue Task Force "should be formally commissioned by the Board of Supervisors as an advisory board working with the Emergency Services Office and reporting regularly to the Board of Supervisors. Moreover, the new Advisory Board should be broadened to include law enforcement representation. (2)

SFY 1.1.2 Fire and Rescue Strategic Plan: Develop and ratify a comprehensive strategic plan for fire and EMS services in Montgomery County. This plan should be based on sound demographic and other data. Funding decisions should be made based upon this plan and upon compliance with other requirements established by the Board. (3)

**SFY 1.1.3 Response Performance Goals**: Establish response performance goals and such other fire and EMS performance goals as may be desired using input from the fire and EMS agencies, county staff, the medical community and the public. (4)

## **Cross References and Notes**

Note: the EMSSTAR report (2003) is available, upon request, from the Montgomery County Public Information Office.

- 1. See EMSSTAR Recommendations 2.1.1, 2.2.1, .
- 2. See EMSSTAR Recommendations 2.1.1, 3.1.3.
- 3. See EMSSTAR Recommendations 3.2.3. When completed, portions of the Fire and Rescue Strategic Plan recommendations should be reviewed and adopted into this plan.
- 4. See EMSSTAR Recommendations 3.1.3 and 3.3.3

**SFY 1.1.4 NRV Hazard Mitigation Plan**: Review the draft NRV Hazard Mitigation Plan prepared by NRV Planning District Commission staff for adoption by the County in order to satisfy FEMA requirements for a hazard mitigation plan. (5)

**SFY 1.1.5 GIS Support**: Continue County GIS support for both law enforcement and emergency services activities especially in order to provide compatible and readily available geodata in support of law enforcement and emergency services activities throughout the County.

**SFY 1.2 Public Involvement**: Recognize and support the role of citizen volunteers in the delivery of law enforcement and emergency services throughout Montgomery County. Moreover, promote a better understanding of law enforcement and emergency services issues by all County residents.

**SFY 1.2.1 Fire and Rescue Involvement**: Support the vital role of volunteers in the delivery of emergency services (fire and rescue) throughout Montgomery County.

SFY 1.2.2 Law Enforcement Involvement: Support programs that increase public involvement and understanding of the law enforcement process such as the Sheriffs Citizen Academy and Neighborhood Watch Program. (6)

**SFY 1.3 Future Capital Facilities**: Use the response performance goals, the future land use policies/map from the Comprehensive Plan, projections for future traffic and road improvements from the MPO, and other pertinent data to develop a plan to locate and fund future law enforcement and emergency services facilities that are necessitated by a growing County population. (7)

<sup>5.</sup> The New River Valley Hazard Mitigation Plan is also addressed in ENV 4.3 Floodplains: Public Safety (pg. 39) and UTL 4.2: Regional Hazard Mitigation Plan (pg. 38).

<sup>6.</sup> Citizen academies are also addressed in PNG 2.2.3: Citizen Academies (pg. 19).7. See EMSSTAR Recommendation 3..6.

**SFY 1.3.1 Cash Proffers**: Develop a cash proffer guideline to address County capital facility needs for law enforcement and emergency services facilities.

**SFY 1.3.2 Capital Facilities and Funding**: Continue to work, annually, through Capital Improvements Program to identify future capital facility needs and the means for funding them.

**SFY 1.3.3. Animal Shelter**: Provide adequate, humane animal control services and facilities.

**SFY 1.4 New Development**: Proactively consider public safety issues in the County's review and approval of new residential, commercial, industrial and institutional developments.

**SFY 1.4.1 Site Plan Review**: Involve the Emergency Services Coordinator in the site plan review process for major residential, commercial, industrial and institutional developments proposed for the unincorporated portions of the county.

**SFY 1.4.2 Street Signs and House Numbers**: Work with county departments e.g. General Services (street

## **Cross References and Notes:**

8. Cash proffers and guidelines are more fully addressed in PLU 2.2: Proffer Guidelines (pg. 14).

9. The Capital Improvements Program (CIP) is addressed in the implementation portion of the Introduction, as well as in PNG 7.1.2 Capital Improvements Program (pg. 69); EDU 1.1.3 Facilities Renewal Program (pg. 29) and PRC 2.1.2 Recreational Priorities and Funding (pg. 53).

signs) and Building Inspectors (house numbers) to insure that new structures can be easily located in the field by emergency and law enforcement personnel.

SFY 1.5 Regional Opportunities: On selected issues, a regional approach may provide services more efficiently and effectively. In some cases this may involve the County working cooperatively with Blacksburg, Christiansburg and Virginia Tech. In other cases this may involve the County working cooperatively with other New River Valley governments and possibly local governments in the Roanoke Valley.

**SFY 1.5.1 Regional Swift Water Rescue Team:** Evaluate the feasibility of County support for a regional swift water rescue team.

**SFY 1.5.2 MERIT Emergency Communications Center:** Evaluate the feasibility of County participation in a Montgomery Emergency Response Information Team (MERIT) Emergency Communications Center serving the county, Blacksburg, Christiansburg and Virginia Tech.

**SFY 1.5.3 Regional Training Facility**: Evaluate the feasibility of County participation in the development of a regional training facility for use by fire, rescue and law enforcement personnel.

## Recreational Resources: Goals

- **PRC 1.0 Regional Cooperation and Collaboration:** To encourage the multi-use of existing facilities, while encouraging regional approaches to new recreation opportunities, which provide the broadest range of recreational experiences to all residents of Montgomery County, including those who live in Christiansburg and Blacksburg.
  - **PRC 1.1 Local Cooperation:** Continue to work with the Towns of Blacksburg and Christiansburg and with county schools to develop regional policies, facilities, and programs for the benefit of all residents of Montgomery County.
    - **PRC 1.1.1 Joint Meetings:** Initiate regular meetings between town and county recreation directors followed by joint meetings of the three recreation commissions.
    - **PRC 1.1.2 Large Town Policies:** Investigate recreational policies of other Virginia counties with large towns in order to evaluate alternative plans of action for county recreation.
    - **PRC 1.1.3 Regional Master Plan:** Develop a "regional master plan" to avoid duplication of similar facilities and programs between towns and county.
    - **PRC 1.1.4 Facility Sharing:** Coordinate facility sharing and "program-sharing" between the county, the county schools and the towns through cooperative agreements and/or a uniform policy on the use of recreational facilities. (2)
    - **PRC 1.1.5 Regional Parks Authority:** Evaluate the feasibility of establishing a Regional Parks Authority.
    - **PRC 1.1.6 Special Events.** Work with neighboring jurisdictions and local organizations to organize and sponsor special events, including festivals and concerts.

- 1. Local and Regional Cooperation are a central theme to this plan. Additional references to cooperative and collaborative approaches is addressed in PNG 1.0: Local and Regional Cooperation (pg. 18) and footnote.
- 2. Facility Sharing is incorporated under the heading of multi-use and is addressed in PNG 3.0 Access (pg. 19).

- **PRC 1.2 Private / Non-Profit:** Work with private and non-profit civic clubs to develop new and enhance existing sport leagues throughout the County (e.g., New River United Soccer Association).
  - **PRC 1.2.1 Sports Needs:** Determine the needs and desires of existing sport leagues in the county and the appropriate role of the county in meeting these needs.
  - PRC 1.2.2 Public/Private Partnership Facilities: Develop clear policies for the future use of facilities that are constructed and/or maintained with funding from non-profit groups.
- **PRC 1.3 Cooperative Agreement:** Work to establish cooperative agreements with Virginia Tech, Radford University and the City of Radford for facility sharing that will benefit all citizens of Montgomery County.
  - **PRC 1.3.1 Kentland Farms:** Work with Virginia Tech to open the 4+ miles of New River frontage to recreational use by both students and county residents.
  - **PRC 1.3.2 Trail Linkage:** Develop a trail system that will link to the City of Radford and the two universities to better meet the needs of the student population and city residents (e.g. Kentland Farms river access and Dedmon Center & Bissett Park).

- **PRC 2.0 Recreational Facilities and Programs**. To provide a broad variety of recreational opportunities and traditional and special use facilities for all citizens of Montgomery County, with special attention to the recreational needs of youth, young adults, and senior citizens. (3)
  - **PRC 2.1 Outdoor Facility Master Plan (OFMP)**: Revise, formally adopt, and use the Outdoor Facility Master Plan as a guide for the development of new parks and recreational facilities, including pocket, neighborhood, village, and regional parks, as well as special use facilities, trails, and heritage parks.
    - PRC 2.1.1 Recreational Priorities and Funding: Decide on the top projects in the OFMP and develop funding strategies for them including incorporation into the Capital Improvements Plan (CIP), use of grant funds and other sources of funding.
    - **PRC 2.1.2 Cash Proffers:** Evaluate cash proffers as a funding tool for recreation facilities identified in the OFMP that are necessary to meet the recreational needs of an increasing county population.
    - PRC 2.1.3 Operational and maintenance needs: Broaden the OFMP to better address indoor facilities as well as operational and maintenance needs.
    - PRC 2.1.4 Village Plans: Work with residents in each of the villages to address recreational needs in their Village Plans, including community, neighborhood, pocket, and tot parks and walkway/bikeway facilities. (5)
  - **PRC 2.2 Accessibility:** Make existing recreational facilities accessible to all county residents, both in terms of how the facilities are accessed and used.

#### **Cross References and Notes:**

- 3. Recreational facilities include traditional regional parks, multi-use sports facilities (developed in conjunction with the public schools), community and neighborhood parks, Heritage Parks and Trails, pocket parks, and tot parks, as well as special use facilities.
- 4. Cash proffers are more fully addressed in PLU 2.2: Proffer Guidelines (pg. 14). 5. Villages and Village planning are addressed in PLU 1.7: Villages (pg. 9); PLU 1.6 Village Expansion Areas (pg. 7); and PNG 4.0 Villages and Small Communities (pg. 20).

- **PRC 2.2.1 Facility Location:** Develop major facilities in areas that are accessible by major roads thereby providing the opportunity for existing and/or future bus services.
- PRC 2.2.2 Facility Accessibility: Develop a plan to ensure that existing and new facilities are accessible to all Montgomery County residents, with special attention to the needs of differently-abled residents, by meeting the accessibility standards established under the Americans with Disabilities Act (ADA).
- **PRC 2.3 Trails:** Provide a high quality trail network, based on a series of trails and activity or education nodes, throughout the county, which offers both increased individual and family recreational opportunities and alternative transportation routes between jurisdictions and outlying villages. (6)
  - **PRC 2.3.1 New River Trail Linkage:** Support New River Valley Planning District Commission efforts to develop a multi-jurisdictional plan for linking the Huckleberry Trail to the New River Trail via Christiansburg and Radford.
  - **PRC 2.3.2 Business/Industrial Park Trail:** Develop bikeway/walkway trails in existing and proposed business/industrial parks.
  - **PRC 2.3.3 Trails and Nodes:** Develop recreation facilities in collaboration with the County and Towns master plans for trails (including bikeways and walkways).
- **PRC 2.4 Commercial Recreational Facilities:** Encourage the development of for-profit, privately-owned recreational facilities in the County when they are sited in appropriate locations.
- **PRC 2.5 Planning Review**: Involve the Parks & Recreation Commission in the review of rezoning and special use permit requests for recreation facilities desiring to locate in the unincorporated areas of the County.

## **Cross References and Notes:**

6. Trails are also addressed in CRS 3.2 Heritage Parks and Trails System (pg. 24) and TRN 4.2 Bikeways, Walkways, and Trails (pg. 59).

## Transportation Resources: Goals

**TRN 1.0 Land Use and Transportation Goal:** Coordinate land use planning with transportation planning in order to reduce traffic congestion and to balance development needs with the desire for livable communities. (1)

TRN 1.1 Public Information and Outreach: Actively promote public participation in the transportation planning and decision-making processes and public use of transportation opportunities in Montgomery County by: 1) providing for public input opportunities; 2) maintaining and publicly distributing transportation-related GIS data in order to track changes in land use and transportation opportunities; and 3) providing access to a broad range of transportation related information to increase public understanding and awareness and promote public use of the transportation modes offered in Montgomery County. (2)

## **TRN 1.1.1 Transportation Related Public**

**Involvement:** Increase public involvement in transportation-related decisions, including: 1) work with the MPO and other local jurisdictions to develop a policy to encourage significant public input and involvement in transportation and corridor planning; and 2) work with local organizations to encourage significant public input and involvement in local corridor and village planning initiatives. (3)

## TRN 1.1.2 Transportation Map (GIS) and Public

#### **Cross References and Notes:**

1. Specific transportation land use policies are include in the Planning and Land Use chapter, including Resource Stewardship Areas (PLU 1.2.3 [c][d])(pg. 2); Rural Areas (PLU 1.3.3 [c][d])(pg. 3); Rural Communities (PLU 1.4.2 (b) and PLU 1.4.3 [c][d])(pg. 5); Residential Transition Areas (PLU 1.5.3 [c])(pg. 6); Village Expansion Areas (PLU 1.6.4 [c][f] and PLU 1.6.5 [c])(pg. 8); Villages (PLU 1.7.4 [d]][e] and PLU 1.7.5 [c][d])(pg. 44-5); and Urban Expansion Areas, including corridor planning (PLU 1.8.2, PLU 1.8.3 [c], and PLU 1.8.5 [c](pg. 45-46). Additional provisions for Road Access (PLU 2.1 [c]), Interparcel Access [PLU 2.1 [e]) and Pedestrian Access (PLU 2.1[f]) (pg. 14) are included under the land use policies for new development. Street considerations are included in the traditional neighborhood design (PLU 3.0 [b-i-vii, pg. 50). Safe Neighborhoods are addressed in HSG 1.3.3: Safe Neighborhoods and Transportation (pg. 49).

2. The provision of public information is one of the central themes of *Montgomery County*, 2025. Additional information on the plan's approach to public information is included in PNG 2.2: Informing the Public (pg. 19).

3. Corridor planning is addressed in PLU 1.8.2: Corridor Planning (pg. 11).

**Information:** Provide an annually updated Montgomery County Transportation Map, legibly labeled, which would include all road names, route numbers, walkway/bikeway routes, public transit stops, park and ride lots, airports, and other transportation information generated by Montgomery County and the Metropolitan Planning Organization (MPO). (4)

## TRN 1.1.3 Transportation Related Public

Information: Provide broad-based public access to print and electronic based transportation-related information, including Montgomery County Transportation Map, annually updated; Montgomery County GIS data and online mapping service; Metropolitan Planning Organization (MPO) data, meeting minutes, and reports; roadway maintenance problems and directions for notifying the Virginia Department of Transportation (VDoT) when maintenance problems arise; Park and Ride facilities and information; and bikeway, walkway, and Heritage Trail information.

## TRN 1.2 Metropolitan Planning Organization (MPO):

Provide ongoing, long-term support of and assistance to the Metropolitan Planning Organization.

TRN 1.2.1 2030 Long-Range Transportation Plan: Provide input on County land use issues into the MPOs ongoing transportation planning process and the MPOs preparation of the 2030 Long-Range Transportation Plan, which will address: 1) future road improvements for arterial and collector roads, including flexible, context-sensitive road design standards; 2) mass transit; and 3) Heritage Trails, bikeways, and walkways. (5)

#### **Cross References and Notes:**

4. The County's Geographic Information System (GIS) provides both County staff and County residents with a powerful analytic tool. Additional information on the GIS system is included in Cultural Resources (CRS 1.2.2, pg. 22), Environmental Resources (ENV 1.3, pg. 31), Public Safety (SFY 1.1.5, pg. 50), and Utilities (UTL 1.4.3, pg. 62).

5. The Heritage Trail system, bikeways, and walkways are addressed in TRN 4.2 Walkway/Bikeway Update (pg. 59); CRS 1.1.3: Heritage Parks and Trails System (pg. 22); HSG 1.3.3: Safe Neighborhoods and Transportation (pg. 49); PRC 1.3.2: Trail Linkages (pg. 52); and PRC2.3: Trails (pg. 53).

**TRN 1.2.2 Cooperative Review:** Develop a cooperative review policy/ agreement whereby Montgomery County would include the MPO, along with other local jurisdictions, and vise versa in addressing transportation issues for new, major developments.

**TRN 1.3 Subdivisions:** Proactively review, on a regular basis, the Subdivision Ordinance with respect to those issues that involve both land use and transportation. By regularly reviewing the subdivision ordinance, the county can establish proactive policies which address land use and transportation issues, including cul-de-sacs, street continuation and connectivity, and right-of-way standards. (6)

**TRN 1.3.1 Cul-de-sac:** Review the Subdivision Ordinance requirement limiting the number of lots permitted on a dead end cul-de-sac rather than limiting the linear feet of the cul-de-sac.

## TRN 1.3.2 Street Continuation and Connectivity:

Require that the arrangement of streets in new subdivisions: 1) make provisions for connectivity and for the continuation of existing streets into adjoining areas; and 2) delineate future street extensions on subdivision plats in order that lot purchasers are aware that the streets in their subdivisions are likely to be extended to adjoining properties. (7)

**TRN 1.3.3 Right-of-Way Standards:** Require new lots, created by subdivision, abut streets meeting VDoT right-of-way standards. This requirement leads to the dedication of additional right-of-way when lots are platted along existing streets with substandard right-of-way widths. Exceptions are made for family subdivisions and lots with private access easements.

**TRN 1.3.4 Context Sensitive Street Designs.** Work with VDoT to develop road standards which allow for

#### **Cross References and Notes:**

6.See footnote #1 (pg. 54).

context sensitive street designs in Villages and urbanized areas. (8)

**TRN 1.3.5 Pedestrian Oriented Facilities**. Require the provision of pedestrian facilities (sidewalks, walkways, trails, etc.) in new developments in the Village, Village Expansion, Residential Transition, and Urban Expansion Areas. (9)

**TRN 1.4 Connectivity and Access Management:** Provide for the safe, orderly, and efficient flow of traffic along roads classified as major and minor arterials by 1) incorporating access management strategies in the review of development proposals; and 2) asking the Metropolitan Planning Organization (MPO) to assist in evaluating ingress, egress, and connectivity requirements. This requirement would limit the burdening of any one road with only one ingress and egress and encourage connectivity. Presently such a requirement exists only for the 177 Corridor Planning Area.

**TRN 1.4.1 Strip Development:** Discourage strip development, particularly of commercial properties, along important transportation corridors by designating areas that can be zoned to serve as compact centers for development, including village and urban centers and major road intersections.

**TRN 1.4.2 Commercial Access:** Require that high volume/ high turnover commercial establishments (drive-thru restaurants and convenience stores for example) locate within other commercial development where access to the facility is from the development, not from the major thoroughfare.

<sup>7.</sup> Street continuation and connectivity are central themes in the County's approach to transportation planning. Additional references can be found in the Planning and Land Use chapter (see note #1 for specific references); and HSG 1.3.3 Safe Neighborhoods and Transportation (pg. 49), as well as other portions of this chapter.

<sup>8.</sup> The need for a flexible, contextual approach to road standards is especially important in the Villages and Rural Communities where historic patterns of development differ from existing state road standards and where the historic fabric of the community could be disrupted or destroyed if current standards were strictly applied. Additional information on transportation issues and contextual road standards as they apply to rural communities and villages can be found in PLU 1.4.2[b], 1.4.3 [c][d], 1.7.4[d][e], and 1.7./5 [c][d] (pgs 5, 10-11). In addition, street sensitive design is also addressed in the Proposed Revision Virginia Department of Transportation Subdivision Street Requirements (published in the Virginia Register on May 3, 2004) and Draft Virginia Department of Transportation Subdivision Street Design Guide (Appendix B of the Road Design Manual) dated 12/19/2003

<sup>9.</sup> Pedestrian-oriented development is addressed in PLU 1.6 Village Expansion Areas (pg. 7), PLU 1.7: Villages (pg. 9), and PLU 3.0 Community Design (pg. 16).

**TRN 1.4.3 Shared Access:** Encourage shared access for roads classified as major and minor arterials and major and minor collectors.

**TRN 1.5 Road Standards:** Encourage flexibility in the application of road design standards. The application of any standards should consider a roads context and setting and the impact of the proposed design upon the community and the environment.

**TRN 1.6 Cash Proffers:** Evaluate the development a Cash Proffer System, in partnership with Blacksburg and Christiansburg, to address the impact of new development on the transportation system and provide funding to alleviate future problems. (10)

**TRN 1.7 Comprehensive Plan Compliance.** Actively review all transportation and land use projects and proposals to determine compliance with the applicable sections of the comprehensive plan and land use policies.

**TRN 2.0 Highway System:** Manage, enhance, and maintain the current network of transportation in order to maximize safety and efficiency and facilitate economic development, while reducing natural and built environmental impacts.

TRN 2.1 Maintenance: Encourage the Virginia Department of Transportation and Montgomery County to approach efficient and effective maintenance of existing public roads as a first priority, in order to extend roadway surface life, minimize traffic congestion, and increase public safety during all seasons and under all weather conditions. It is important to maintain current transportation routes as the most cost effective alternative to building new roads. Maintenance of our roads will provide a safe travel surface, eliminate hazards to pedestrian and vehicular traffic, and protect the financial investment in the roadway system by preventing progressive deterioration of the pavement and shoulders.

**TRN 2.2 Safety:** Encourage law enforcement to enforce speed limits, stoplights, and all other traffic laws in order to effectively protect: 1) the public health, safety, and welfare; 2) residents' quality of life; and 3) the fluidity and efficiency of both our vehicular and our pedestrian transportation systems. (11)

**TRN 2.2.1 Law Enforcement Personnel:** Encourage local and regional jurisdictions to increase the number of law enforcement personnel, in order to more effectively enforce the law and provide a higher quality of life and a safer atmosphere to the Montgomery County citizens.

## TRN 2.3 Alleviating Traffic Congestion and Accidents. Identify congestion and accident prone routes and intersection

Identify congestion and accident prone routes and intersections and adopt policies to alleviate congestion, increase safety, and decrease car trips.

## TRN 2.3.1 Problem Intersections and Routes:

Identify problematic intersections and routes in Montgomery County, and work with the Metropolitan Planning Organizations and The Transportation Safety Commission to find solutions.

## **Cross References and Notes:**

11. Public Safety considerations are also addressed in SFY 1.0: Public Safety (pg. 50). In addition, public safety considerations are central to the design of safe neighborhoods, addressed in HSG 1.3: Safe Neighborhoods (pg. 49).

## **Cross References and Notes:**

10. Proffers are addressed, more fully, in PLU 2.2: Proffer Guidelines (pg. 14).

**TRN 2.3.2 Park-and-Ride:** Work with the MPO to develop a regional park-and-ride lot strategic plan which would: 1) provide facilities in outlying areas of Montgomery County and adjacent jurisdictions; 2) evaluate existing, under utilized parking lots for park and ride opportunities; and 3) establish a public awareness program to encourage increased usage of park-and-ride facilities.

**TRN 2.4 Access Management:** Encourage the practice of access management both in Montgomery County and regionally, which will deter expensive road improvements, allow safer driving conditions while decreasing traffic congestion, and increase safety for pedestrians and cyclists.

## **TRN 2.4.1 Corridor Planning and Access**

**Management:** In cooperation with the New River Valley Planning District Commission, develop a regional approach to the corridor planning process (e.g. The 177 Corridor Plan) which incorporates access management techniques, (12)

TRN 2.5 Interstate 81 Corridor Improvements: Support the multi-year Environmental Process currently being conducted by the Virginia Department of Transportation and the corridor improvements identified in the 1998 Virginia Department of Transportation (VDoT) study to meet the future needs county residents and those passing through the county on Interstate 81. (13) Any proposal for improvements to the Interstate 81 corridor must address the following eight issues of significance to Montgomery County:

**TRN 2.5.1 Smart Road:** The future Smart Road interchange should be evaluated and incorporated into the design and construction of any improvements.

## **Cross References and Notes:**

12. Corridor planning is also addressed in PLU 1.8.2: Corridor Planning (pg. 11). Additional considerations are also included in PLU 3.0: Community Design (pg. 16) 13. Montgomery County is concerned (Board resolution of October 27, 2003) with the two private proposals (Fluor and Star Solutions) for improvements to the Interstate 81 corridor submitted under the Public Private Transportation Act of 1995 (PPTA). The two proposals are vastly different from each other and neither proposal corresponds to the concept study for Interstate 81 corridor improvements developed for VDoT in 1998. Moreover VDoT is beginning a multi-year Environmental Process to determine the purpose, need, and scope of corridor improvements. Therefore, any proposal decision should not be made until the Environmental Process is complete.

**TRN 2.5.2 Scenic Beauty:** Encourage green medians and discourage soundwalls in order to maintain scenic beauty throughout the corridor. (14)

TRN 2.5.3 Rail Alternatives: Require a detailed study and serious consideration of passenger (Trans Dominion) and freight rail service alone the entire Interstate 81 corridor, including possible improvements in adjacent states. (15)

TRN 2.5.4 Toll Free Local Traffic: Structure toll policies to exempt local traffic: 1) within the Blacksburg MSA (Blacksburg, Christiansburg, and Radford) and 2) between the adjoining Blacksburg MSA and the Roanoke MSA.

**TRN 2.5.5 Toll Facility:** Location Locate toll facilities where they will not have an adverse impact on local highways. For example, the Fluor proposal locates a toll facility at mile marker 116 thereby dumping significant traffic onto the local streets of Christiansburg.

**TRN 2.5.6 Stormwater Management:** Encourage VDoT to work with appropriate local governments in the design and construction of regional stormwater management facilities along the corridor. (16)

TRN 2.5.7 Agricultural & Forestal Districts (AFDs): Discourage expansion of right-of-ways beyond what was identified in VDoT's 1998 concept study in order to minimize the impact on Agricultural and Forestal Districts (AFDs) in Montgomery County. (17)

#### **Cross References and Notes:**

14. Scenic beauty, in the form of viewsheds, is a significant advertising resource for Montgomery County. The I-81 corridor functions as both an introduction to and an invitation to travellers to stop and explore the County. The preservation of access to viewsheds and the scenic beauty the County has to offer is address in CRS 1.1: Historic Villages, Districts, and Corridors (pg. 22); CRS 1.3: Historic Preservation and Tourism (pg. 23); ENV1.0: Open Space (pg. 31); and ENV 2.3: Viewsheds (pg. 32).

15. Rail transportation is covered in TRN 5.0: Multi-Modal Transportation (pg. 60) 16. Stormwater Management is also addressed in UTL 4.0: Stormwater Management (pg. 64); ENV 6.5: Stormwater Management (pg. 42); and ENV 7.0: Stormwater and Erosion Control (pg. 148).

17. Agricultural and Forestal districts are addressed in ENV 2.1.3: Agricultural and Forestal Districts (pg. 34) and ENV 3.1.6: Agricultural and Forestal Districts (pg. 34).

**TRN 2.5.8 Rest Areas:** Encourage the construction of adequate rest areas, which provide separate facilities for cars and trucks, through out the corridor.

TRN 2.6 Virginia Scenic Byways: Virginia Byways are existing roads with significant aesthetic and cultural values, leading to or lying within an area of historical, natural or recreational significance. Montgomery County, in conjunction with Virginia Department of Transportation (VDoT) and the Department of Conservation and Recreation (DCR), will work to identify, evaluate and designate roads in the county that have important and unique scenic value and experiences, provide diverse landscape experiences, provide linkages and access, provide leisurely motoring experiences, and are regionally significant.

**TRN 3.0 Mass Transit:** Create a better mass transit system (rail, bus, trolley, carpool) that allows for mobility of all citizens. (18)

**TRN 3.1 Existing Service:** To maintain and enhance the existing Blacksburg Transit (BT) transit service in order to maximize safety and efficiency while minimizing environmental degradation.

TRN 3.1.1 Efficient Transit: Encourage BT to provide more efficient and well-planned service routes, with "safe" bus stops and "safe" access to those bus stops, including: 1) well-planned service routes to decrease time spent waiting for the bus; 2) lit and well marked bus stops; and 3) and sidewalks or walkways/ bikeways to access bus stops safely rather than walking on the shoulder of a busy road.

**TRN 3.1.2 Transit Service Extension:** Request that the Metropolitan Planning Organization (MPO) evaluate mass transit extensions as part of the 2030 long-range transportation plan including the extension of the Two Town Trolley service between Blacksburg and Christiansburg to include Radford. (19)

**TRN 3.2 Future Service:** Encourage the provision of a mass transit service in commercial areas and between jurisdictions (Blacksburg, Christiansburg, Radford) and between MSAs (Blacksburg and Roanoke) to alleviate congestion and decrease the number of personal car trips.

TRN 3.2.1 Micro-shuttle: Ask the Metropolitan Planning Organization (MPO) to evaluate micro-shuttle service to area businesses within the core shopping area. This study would evaluate cost, demand, efficiency, and transit route tie-ins. A shuttle service would simply be a small-localized loop within the core shopping area, whereas the transit relay would serve a larger area. Possible funding sources could be businesses that would have a shuttle stop in front of their store, the jurisdictions served by the commercial area, and Chamber of

<sup>18.</sup> Park and Ride facilities for outlying areas and public awareness programs for carpooling are addressed in TRN 2.3.2 (pg. 57)

<sup>19.</sup> Public transit services provide transportation for lower income and disabled commuters to travel to work and to the commercial areas in the County, as suggested in HHS 2.3: Transportation (pg. 45).

Commerce. Ideally, the micro-shuttle would be operated by BT and would tie into existing bus routes.

**TRN 3.2.2 Valley Metro Service:** Establish clear benchmarks to measure the success or failure of Valley Metro's demonstration project for express bus service between Blacksburg and downtown Roanoke.

TRN 3.2.3 Alternate Transit Transfer Site: Encourage Blacksburg Transit and Virginia Tech to evaluate an alternative to the existing transit transfer area on campus at Burress Hall. While Burress Hall serves the Virginia Tech population well, it does not purposefully serve other users of the BT transit system. The idea is to make mass transit more usable by all citizens; therefore finding an additional off-campus transit transfer site would be very beneficial.

**TRN 3.3: Villages and Public Transportation:** Evaluate the provision of public transportation between the six villages (Belview, Elliston-Lafayette, Plum Creek, Prices Fork, Riner, and Shawsville) and the urban centers (Blacksburg, Christiansburg, and Radford).

TRN 4.0 Alternative Transportation: Support viable alternative modes of transportation (walking/biking trails) and provide connectivity to existing transportation networks. Walking and biking trails are an important alternative mode of transportation that can reduce congestion from the use of private cars. By managing the existing trails network and providing connectivity to other modes of transportation, the County can develop a comprehensive transportation network that balances safety, mobility, cost, and environmental impact. When walkway and bikeways interconnect, people are more likely to use them to get to and from work, shopping, etc. The Huckleberry Trail, Mid-County Park Market Place Connection, and New River Trails are walkways/ bikeways that should be linked with other local and regional walkway/ bikeway systems. (20)

**TRN 4.1 Commercial/ Public Use:** Evaluate sidewalk and bike rack requirements for commercial and public use developments in order to encourage the use of alternative transportation and alleviate congestion.

TRN 4.2 Bikeways, Walkways, and Trails: Encourage coordination between the County, Blacksburg, Christiansburg, and regional jurisdictions in order to provide connectivity of all bikeways, walkways and Trails.

TRN 4.2.1 Bikeways, Walkways, and Trails Coordination: Use the Metropolitan Planning Organization (MPO) framework to create coordination committee to study the connectivity of the bikeway, walkway, sidewalk, and heritage trail network..

**TRN 4.2.2 Walkway/ Bikeway Update:** Work with the Metropolitan Planning Organization to review and update the Bikeway, Walkway, and Heritage Trails Plan.

#### **Cross References and Notes:**

20. The provision of pedestrian-oriented transportation facilities (bikeways, walkways, sidewalks, and Heritage Trails) are at the core of a number of different provisions in this plan. They are central to the establishment of safe neighborhoods (HSG 1.3.1, pg. 49); provide connectivity in rural communities (PLU 1.4.2[b], pg. 5), villages (PLU 1.7.3[a], 1.7.4[d], and 1.7.5[d], pgs. 10-11), village expansion areas (PLU 1.6.5[c] and 1.6.5[c], pg. 8) and urban expansion areas (PLU 1.8.4[c], pg. 12); are encouraged in new developments [PLU 2.1[f], pg. 14) and in neighborhood and community design (PLU 3.1.1[b][i-v], pg. 16), provide recreational opportunities (PRC1.3.2 and 2.3, pgs.52-53), and provide additional commuting opportunities to the large scale economic and industrial areas (PRC 2.3.2, pg. 53).

TRN 5.0 Multi-Modal Transportation Goal. Encourage, maintain, and enhance air and rail transportation service in Montgomery County and the New River Valley. The New River Valley provides Virginia with a rich resource of educational institutions. With those institutions come high technology industries and businesses. Public transportation rail and air links between southwest Virginia, the State Capital, and Washington, D.C. are essential for the continued growth and prosperity of the New River Valley and would help spawn new economic growth in the more rural western sections of the state. New corporations and high tech industries would take a more favorable look at locating in Virginia with this type of statewide transportation initiative.

**TRN 5.1 Air Transportation:** Maintain and enhance the complementary roles of the three airports serving Montgomery County: 1) Virginia Tech / Montgomery Executive Airport for corporate and general aviation needs; 2 New River Valley Airport for air freight needs, and 3) Roanoke Regional Airport for full-service air passenger needs.

**TRN 5.1.1 Low Cost Carrier Strategy:** Support Virginia Tech's efforts to attract a low cost air carrier to the Roanoke Regional Airport.

**TRN 5.2 Rail Transportation**: Maintain and enhance Norfolk Southern rail service to businesses, industries, and people in Montgomery County.

**TRN 5.2.1 Industrial Rail Spurs :** Support increased rail service and spurs to the industrial areas and parks in the county. (21)

TRN 5.2.2 Interstate 81 Freight Diversion Strategy: Support state efforts to promote rail alternatives to through truck traffic on Interstate 81. This will necessitate consideration of rail improvements in nearby states in conjunction with improvements to "bottlenecks" in Virginia in order to provide competitive, long haul rail service.

TRN 5.2.3 Trans Dominion Express Strategy: Support state efforts to promote high speed passenger rail service for southwestern Virginia.

**Cross References and Notes:** 

21. The Corning Rail Spur is one example.

## **Utilities:** Goals

**UTL 1.0 Water & Sewer Goal:** Provide a planning framework for the provision of public and private water and sewer, so that the water and sewer projects are consistent with the County's land use policies while ensuring adequate, safe drinking water and proper, environmentally safe disposal of wastewater/sewage for all County residents.

**UTL 1.1 Regional Cooperation:** Approach the provision of public water and sewer from a regional perspective in order to provide these services more efficiently and effectively and to provide alternative sources in the event of individual system failures. (1)

**UTL 1.1.1 Regional Water Authority:** Work to obtain full membership for Montgomery County in the Blacksburg, Christiansburg & VPI Water Authority.

UTL 1.1.2 Water Supply Study: Work through the New River Valley Planning District Commission (NRVPDC) to study the long-term water needs (supply & demand) of local users in the county and the district. (2)

**UTL 1.1.3 System Interconnect:** Evaluate the feasibility of interconnecting the major public water systems in Montgomery County and Radford, including the land use implications. (3)

## **Cross References and Notes:**

1. Regional cooperation is one of the linchpins of *Montgomery County*, 2025. Specific information on regional approaches is included in the Introduction and in PNG 1.0: Local and Regional Cooperation (pg. 18). Regional cooperation and efforts are also addressed in other portions of this chapter, most notably in terms of Public Water and Sewer Systems (UTL 1.2, pg. 61), Telecommunication Towers (UTL 2.2, pg. 63), Solid Waste Management (UTL 3.1, pg. 64), and Stormwater Management (UTL 4.0, pg. 64).

2. Surface and groundwater quality are addressed in ENV 3.0: Streams, Rivers, and Surface Waters (pg. 36); ENV 5.0: Groundwater (pg. 39); ENV 5.3: Groundwater Quality Protection Programs (pg. 40); ENV 5.4 Well-Head Protection (pg. 40); ENV 6.0 Karst (pg. 42); and ENV 7.0: Stormwater and Erosion Control (pg. 43).

3. Policies governing the provision of public utilities are included in the following Land Use Policies: PLU 1.2.3 Resource Stewardship Areas (pg. 2); PLU 1.3.3 Rural Areas (pg. 3); PLU 1.4.3 Rural Communities (pg. 5); PLU 1.5.3 Residential Transition Areas (pg 40); PLU 1.6.5 Village Expansion Areas (pg. 8); PLU 1.7.5 Villages (pg. 11); PLU 1.8.5 Urban Expansion Areas (pg. 12); PLU 1.8.6 Municipal Coordination/Cooperation (pg. 13); and PLU 2.1(b) Criteria for Evaluating Rezoning Applications--Public Utilities (pg. 14).

**UTL 1.1.4 Institutional Arrangements:** Evaluate existing authorities, service areas and jurisdictional agreements with regards to greater regional cooperation involving the Blacksburg, Christiansburg & VPI Water Authority, RAAP/Montgomery County and the City of Radford.

UTL 1.1.5 Regional Wastewater Authority: Continue County membership in the Peppers Ferry Regional Wastewater Treatment Authority. Evaluate the feasibility of a regional approach to wastewater treatment involving the Peppers Ferry Authority, the Blacksburg VPI Sanitation Authority and the Crab Creek STP operated by Christiansburg.

**UTL 1.2 Public Systems:** Continue to provide safe and reliable water and sewer utilities at reasonable cost through the Public Service Authority (PSA) and through line extensions from the towns and Radford. Provide for the orderly extension of public water and sewer service to designated growth areas and to areas with designated public health problems. (4)

**UTL 1.2.1 Water Supply:** Study the feasibility of developing an independent and reliable source of safe drinking water for County residents by continuing to work with the Radford Army Ammunition Plant (RAAP).

UTL 1.2.2 Project Priorities: Work with the Public Service Authority (PSA) to evaluate and prioritize the 22 outstanding water and sewer projects added to the Comprehensive Plan by amendments in 1999 and 2002. Among the factors to consider in establishing priorities are: engineering feasibility, financing feasibility,

## **Cross References and Notes:**

4. Specific policies addressing the provision and extension of public utilities in the seven land use policy areas are included in the Planning and Land Use Chapter: PLU 1.2.3 Resource Stewardship Areas (pg. 2); PLU 1.3.3 Rural Areas (pg. 3); PLU 1.4.3 Rural Communities (pg. 5); PLU 1.5.3 Residential Transition Areas (pg. 6); PLU 1.6.5 Village Expansion Areas (pg. 8); PLU 1.7.5 Villages (pg. 11); PLU 1.8.5 Urban Expansion Areas (pg. 12); PLU 1.8.6 Municipal Coordination/Cooperation (pg. 13); and PLU 2.1(b) Criteria for Evaluating Rezoning Applications--Public Utilities (pg. 14).

compatibility with established service areas and compatibility with identified Comprehensive Plan growth areas, designated health problem areas, and the interest of current homeowners in having PSA water and/or sewer.

**UTL 1.2.3 Financing:** Work with the PSA to develop a proactive funding plan for implementation of the top ranked projects. (5)

**UTL 1.2.4 Acquisition:** Upon the request of a private utility or of a significant proportion of the homeowners in a subdivision, evaluate the feasibility of the PSA acquiring and operating the private water or sewer system, which serves the subdivision. Cost sharing by homeowners may be required when a private water or sewer system is acquired by the PSA at the homeowners request.

**UTL 1.2.5 Growth Boundary Strategy:** In compliance and coordination with the County's land use policies, restrict public water and sewer access to future development outside designated growth areas even though the lines may be present in the area.

**UTL 1.3 Private Systems:** Evaluate the construction and operation of private systems for selected areas outside of designated growth areas on a case by case basis.

UTL 1.3.1 Alternative Wastewater Systems: Evaluate the feasibility of using alternative wastewater systems in selected areas of the County instead of extending public sewer lines. Determine the long-term responsibilities of public and private interests in order to insure that regular maintenance is performed on alternative systems.

**UTL 1.3.2 Private System Standards:** Require any private systems to be constructed to Health Department and/or PSA specifications.

## **Cross References and Notes:**

5. This should be done in conjunction with UTL 1.2.2: Project Priorities (pg. 61).

**UTL 1.4 Individual Systems Objective:** Support the proper use of individual wells and private septic systems in areas of the County that do not have public water and sewer and are not expected to have public water and sewer in the foreseeable future. (6)

**UTL 1.4.1 Public Information:** Provide residents with information on the proper (health and environmentally safe) use of individual wells and septic systems. (7)

**UTL 1.4.2 Well Testing:** Work with the Extension Service to periodically repeat their successful 1992 household water quality educational program for individual well users. (8)

**UTL 1.4.3 Utility Database and Geographic Information System (GIS):** Work with the Health Department and other sources of information to map the location of current individual wells, septic systems and potential hazards to groundwater, in order to be better able to predict and prevent future health problems.

<sup>6.</sup> Individual systems are also addressed in ENV 3.3: Individual Septic Systems (pg. 37); ENV 5.1: Septic System and Well Water Testing (pg. 39); ENV 5.2: Education (pg. 40); and ENV 5.3: Groundwater Quality Protection Programs and Policies (pg. 40).

<sup>7.</sup> Public information is also addressed in ENV 5.2: Education (pg. 40). 8. Well testing is addressed in ENV 5.1.2 Septic System/Well Testing with Real Estate Transactions (pg. 39); ENV 5.4: Well-Head Protection (pg. 40); and ENV 5.7.2: Well Testing (pg. 41).

## UTL 2.0 Electric, Telecommunication and Gas Utilities Goal:

Provide for the orderly extension of electric service, telecommunication service (land line, wireless and/or cable) and natural gas service in a manner that supports growth and development without negatively impacting the natural environment.

**UTL 2.1 Underground Lines:** Require underground utility lines and utility easements in new subdivisions.

**UTL 2.2 Telecommunication Towers:** Retain the Regional Approach to Telecommunication Towers amendment to the Comprehensive Plan in 2001. (9)

**UTL 2.2.1 Co-location:** Support the siting of new antennae, microwave dishes, etc. on existing structures such as existing communication towers, tall buildings, water tanks, electric transmission towers, signs, etc. This allows for the "highest and best" use of existing structures and sites that could eliminate the need for construction of a new tower structure in an inappropriate area.

**UTL 2.2.2 Uniform Approach to Siting of New** 

Towers: (10) Siting of new communication towers in a jurisdiction should be reviewed for their potential effects on surrounding jurisdictions as well as the jurisdiction in which the structure is to be located. Newly constructed towers should be built in locations that will provide the lease negative impact to the citizens of each jurisdiction. Montgomery County encourages the use of monopole and/or "stealth towers" for new sites that require new construction or "new builds". The following locations are listed from most to least preferable when considering the siting of communication towers:

- A.Industrial parks (Urban Expansion, Village Expansion, and Villages);
- B.Industrial zoned lands (Urban Expansion, Village Expansion, and Villages);
- C.Commercially zoned lands (Urban Expansion,

## **Cross References and Notes:**

9. The 2001 Regional Approach to Telecommunications Towers amendment to the 1990 Comprehensive Plan has been carried over to *Montgomery County, 2025* and is included at the end of this chapter.

- Village Expansion, and Villages);
- D.High density residential lands (Urban Expansion, Village Expansion, and Villages);
- E. Non-ridge, wooded lands (Rural/Resource Stewardship);
- F. Non-ridge, open lands (Rural/Resource Stewardship);
- G.Medium density residential lands (Village Expansion and Villages;
- H. Medium density residential lands (Residential Transition);
- I. Medium density residential lands (Rural and Rural Communities);
- J. Low density residential lands (Resource Stewardship);
- K. Ridgeline Lands (Resource Stewardship)
- L. Historic Lands/Districts (Villages) (10)

**UTL 2.3 Broadband/Fiber Optic Networks:** Provide greater access to broadband capabilities the Urban and Village Expansion Areas, and Villages in Montgomery County. (11)

**UTL 2.3.1 NRV Telecommunications Plan:** Review and Adopt the New River Valley Telecommunications Plan (2004).

UTL 2.3.2 Open-Access Service Network: Work with the New River Valley Planning District Commission and regional jurisdictions to establish a regional three tier (inter-county, intracounty, and local access) fiber-optic open-access service network, designed to deliver Open Access TCP/IP transport services, in the New River Valley. The network and phasing of the project would be based on the New River Valley Planning District Commission's Proposed Fiber-Optic Network (2004).

## **Cross References and Notes:**

10. The uniform approach to the siting of new towers was referenced in the decision from the 4th Circuit Court of Appeals, in which the Court found in favor of Montgomery County. USCOC of Virginia RSA#3 Inc. v. Montgomery County Board of Supervisors, 343 F3d 262, 2003 U.S. Appeals LEXIS 18682 (4th Circuit 2003)

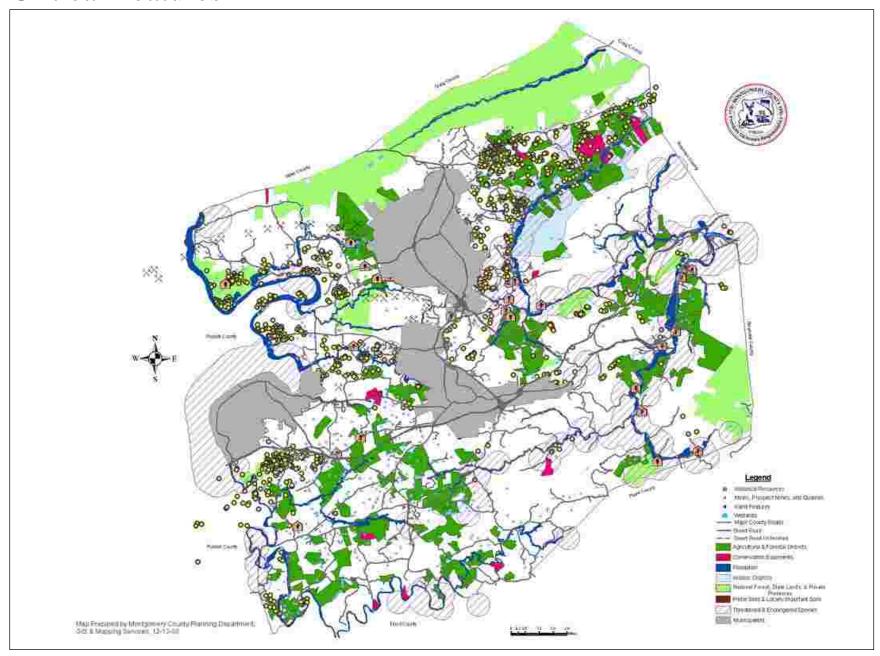
11. The New River Valley Telecommunications Plan (2004) is available from the New River Valley Planning District Commission and can be accessed at: http://www.nrvpdc.org/NRVTelecomPlan/NRVTelecomPlan.html.

- **UTL 3.0 Solid Waste:** Provide for the collection, recycling and disposal of solid waste to satisfy the needs of the County and to provide for the well being of County residents and the environment.
  - **UTL 3.1 Solid Waste Management:** Continue to provide a comprehensive solid waste management program to address the immediate and long-term solid waste recycling and disposal needs of the County.
    - **UTL 3.1.1 Regional Cooperation:** Continue to participate in and support the operation of the Montgomery Regional Solid Waste Authority (MRSWA) and the New River Resource Authority (NRRA).
    - **UTL 3.1.2 Recycling Education:** Encourage increased quality and quantity of recycling through education in cooperation with MRSWA.
    - **UTL 3.1.3 Virginia Tech:** Encourage Virginia Tech to fully fund the on-campus recycling program including the recycling of white office paper.
  - **UTL 3.2 Collection System**: Provide for the orderly collection of solid waste and recyclables in the County.
    - UTL 3.2.1 Consolidated Collection Sites: Increase the number of manned consolidated sites in the County after first determining, from a countywide perspective, the best locations for additional manned sites that most efficiently and effectively meet the needs of county residents. After expanding the system, close down the remaining 2 unmanned green box sites.
    - **UTL 3.2.2 Curbside Pickup**: Continue to allow private companies to provide for curbside pickup of household trash in residential areas of the County.
    - **UTL 3.2.3 Volunteer**: Continue to support volunteer cleanup efforts including the spring cleanup of roadside trash through the Bloomin' and Broomin' program.
    - **UTL 3.2.4 Brush-to-Mulch Strategy**: Continue to provide for brush-to-mulch recycling at the old Mid-County Landfill Site.

- **UTL 4.0 Stormwater Management**: Effectively manage stormwater runoff and erosion in order to protect properties, surface water quality and aquatic habitat to maintain and enhance human health and safety.
  - **UTL 4.1 Watershed Approach:** In cooperation with Blacksburg and Christiansburg, develop a regional stormwater management initiative, based on watershed boundaries, to effectively manage stormwater runoff.
    - **UTL 4.1.1 Stormwater Ordinance:** Consider for adoption of a local stormwater management program to manage both the quantity and quality of runoff. Such programs are permitted as a local option under Virginia Stormwater Management Law. Coordinate with, and encourage, Blacksburg and Christiansburg to adopt similar ordinances.
    - **UTL 4.1.2 Regional Stormwater Facilities:** Within the watershed approach, evaluate the efficiency and effectiveness of fewer, larger detention facilities with more stringent maintenance responsibilities.
    - **UTL 4.1.3 User Fees:** Consider, in cooperation with Blacksburg and Christiansburg, a stormwater utility approach or an impervious surface fee approach or other types of user fees to pay for the development and maintenance of regional stormwater facilities.
  - **UTL 4.2 Village Planning and Stormwater Management.**Work with the County Engineer to develop a stormwater management plans in tandem with each of the six village plans (Belview, Elliston-Lafayette, Plum Creek, Prices Fork, Riner, and Shawsville).
  - **UTL 4.3 Regional Hazard Mitigation Plan:** Review and adopt the regional hazard mitigation plan currently being developed by the New River Valley Planning District Commission (NRVPDC) along with the participation of local jurisdictions. (14)

- 12. Stormwater management is discussed in greater detail in ENV 7.0, including a stormwater management program (ENV 7.1, pg. 43), a stormwater utility (ENV 7.2, pg. 44), and erosion and sedimentation control compliance (ENV 7.3, pg. 44).
  13. UTL 4.2 is cross-listed as ENV 7.1.1 (pg. 43).
- 14. The NRV Regional Hazard Mitigation Plan is also addressed under ENV 4.3: Public Safety (pg. 39) and SFY 1.1.4: NRV Hazard Mitigation Plan (pg. 50). Specific strategies included in ENV 4.0: Floodplains (pg. 38) and SFY1.5: Regional Opportunities (pg. 51) reflect specific suggestions included in the NRV Hazard Mitigation Plan.

# **Critical Features**



# Future Land Use

